

Catalog

2025



THINK! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



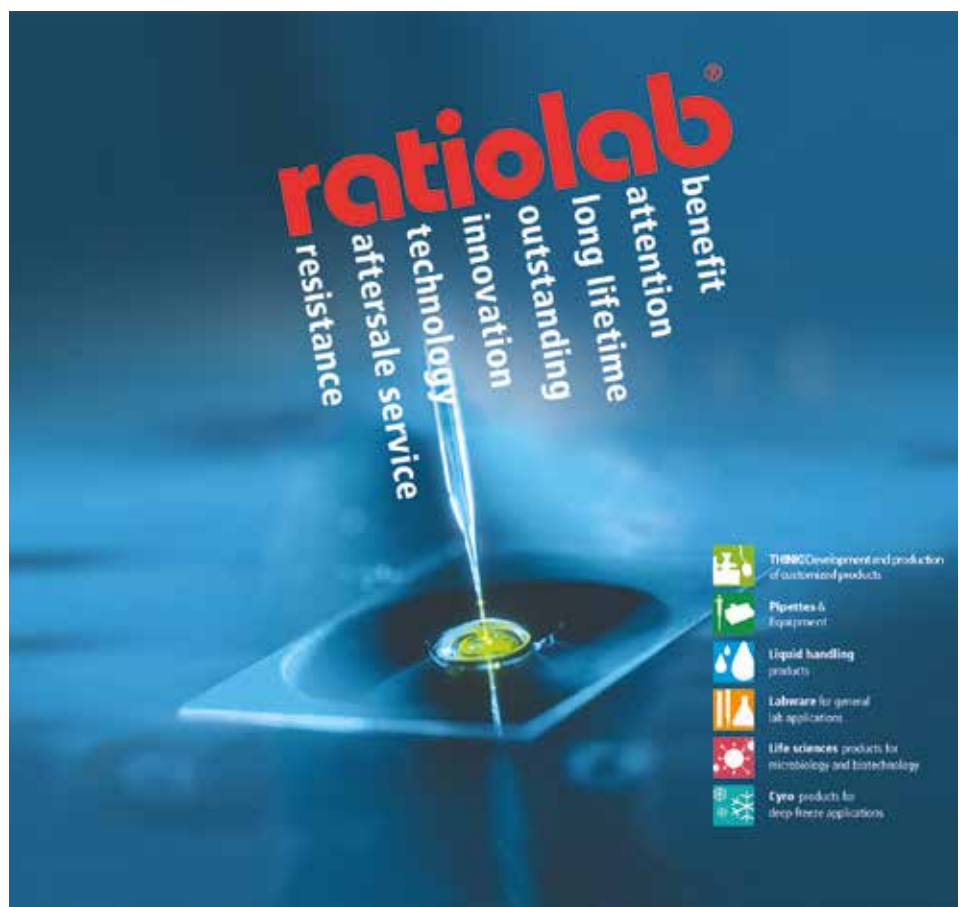
Cryo products for deep-freeze applications

ratiolab[®]
disposables for sciences

rati50lab®

disposables for sciences

50 years of excellence



ratiolab®

benefit
attention
long lifetime
outstanding
innovation
technology
aftersale service
resistance

-  **THING** Development and production of customized products
-  **Pipettes & Equipment**
-  **Liquid handling products**
-  **Labware for general lab applications**
-  **Life sciences products for microbiology and biotechnology**
-  **Cryo products for deep freeze applications**



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Our Company



THINK! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



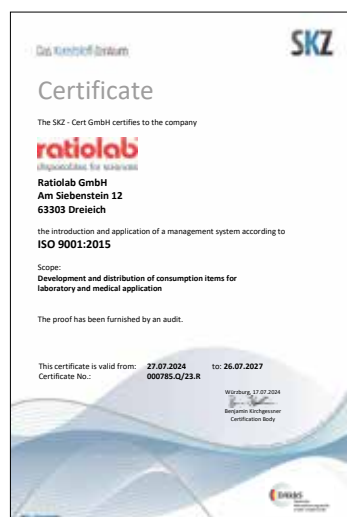
Cryo products for deep-freeze applications

ratiolab® offers and solutions

Beside standardized consumables made from plastic, which you can find in our catalogues, ratiolab® offers the individual development and production of plastic products.

This professional attitude results in products and solutions that laboratories in research, science and industry require in their daily work.

Please contact us, if you have a product idea or a product wish to facilitate your work. Our staff will take care of a solution.



Quality Management

Our Quality Management System is certificated according to DIN EN ISO 9001:2015 and EN ISO 13485:2016; for only uniform high-quality products guarantee the accuracy and reproducibility required in laboratories.



ratiolab® subsidiaries:

- **Dreieich-Buchschlag, Germany**

Headquarters featuring development, sales logistics and administration, all comprising an area of 4,400m².

- **Szada, Hungary**

State-of-the-art production facility, which, since its original setup in 2018, has quintupled in size.

- **Dubai, United Arab Emirates**

Distribution office for the Middle East Region.

Our approximately 85 employees are the basis foundations for our sustainable success. Their competence, motivation and a high degree of social competence are the guarantees for our future growth. Our team lives our values every day.



Dreieich-Buchschlag, Germany



Dreieich-Buchschlag, Germany

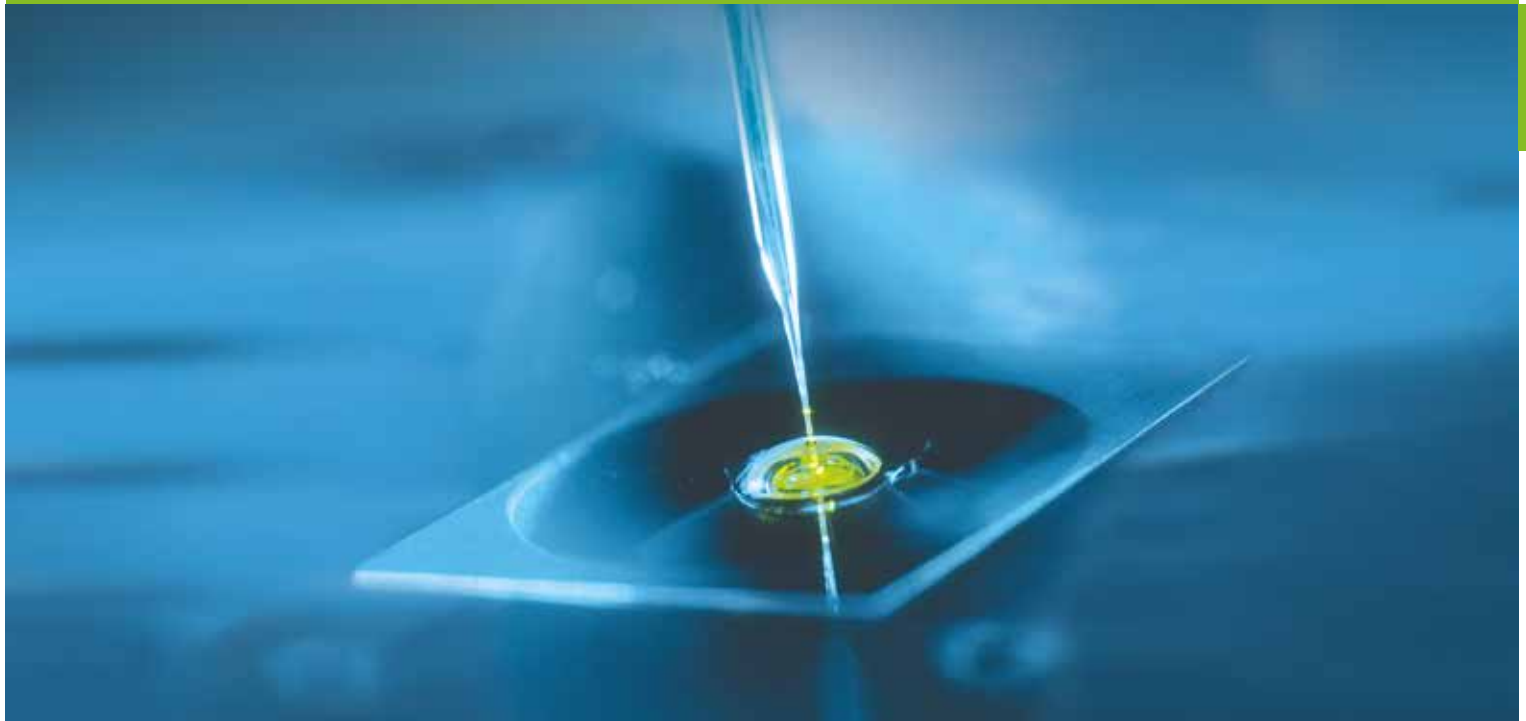


Szada, Hungary



Szada, Hungary

Think!



Think! Development and production of customized products



Pipettes &
Equipment



Liquid handling
products



Labware for general
lab applications



Life science products for
microbiology and biotechnology



Cryo products for
deep-freeze applications

Think!

Development and production of customized products

We give reality to your ideas!

Disposables often have to be as individual and sophisticated as their future field of application.

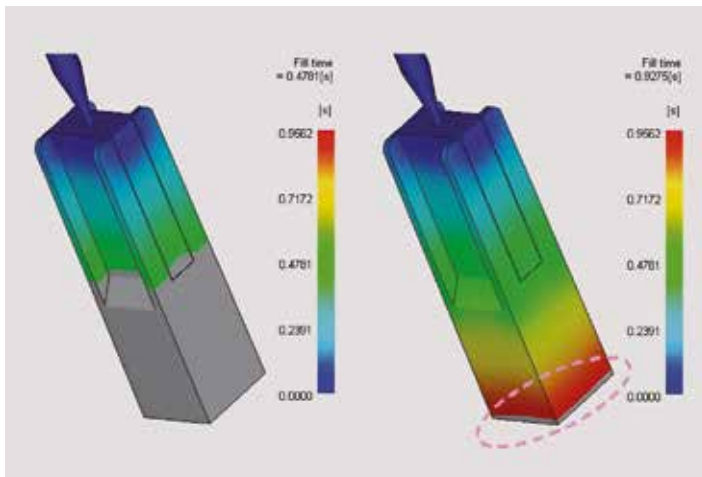
This is where we come in with our "Think" division. Together with our customers, we develop high quality, individual plastic articles. For this purpose, our entire know-how, many years of experience and state-of-the-art technology are at your disposal. Our range of services includes the following areas:



Development and Design

Together with you, we develop your product according to your ideas and requirements. The goal is to provide you with a production-ready and cost-conscious design that considers your customer standards.

- deliberation and transfer of know-how in joint workshops
- creation of a specification sheet based on your requirements
- 3D-CAD design with state-of-the-art programs
- prototyping - production of initial and manual samples using 3D printing and other selected processes
- creation of initial sample reports using 3D measuring machines



Tool and Mold Making

Intelligently designed tools are decisive for successful serial production. Especially for consumables produced in large quantities, factors such as process stability and long tool life are crucial.

- production of tools for plastics processing
- jig and fixture construction
- maintenance and repair of tools



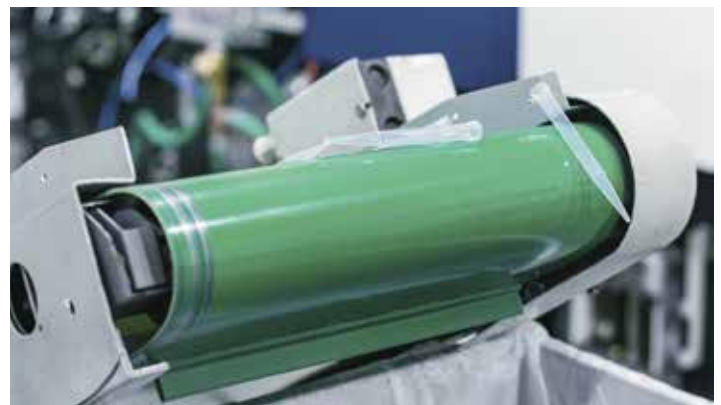
Think!

Development and production of customized products

Plastics Processing

With a highly modern machine park and in a controlled dust-free environment, we manufacture complex and precise plastic products from small to large series in 3-shift operation at our location in Szada. The automated removal, as well as the subsequent handling of the products, are also our competence.

- plastic injection molding production on highly modern machines
- Class 8 and 7 clean room capacities
- state-of-the-art removal systems ensure the safe handling of the products
- highly automated handling systems for efficient further processing of the products in large quantities and fast cycles



Packaging

Our packaging is the individual post-processing of products. Here, we offer the following services for small and large series:

- Quality control
- Packaging of bulk goods as well as manual loading of packaging devices
- Pad printing
- Ultrasonic welding of plastic products



Logistics

We have a large, well-organized warehouse facility. Every day we pick and dispatch numerous shipments all over the world. We are happy to organize the shipping to you or directly to your customers!

Dreieich-Buchschlag, Germany



Szada, Hungary



Pipettes & Equipment



Think! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Slamed Precision Single Channel Pipette



Slamed Precision Single Channel Pipette

The Slamed Precision Pipette – is one of the safest and most economic mechanical pipette. It requires lower insertion and ejection forces for tips to attach and detach. Therefore it reduces the risk of Repetitive Stress Injury (RSI). Meets the highest needs of precision and accuracy while providing high flexibility via large number of variants. Slamed Precision series is remarkably light in terms of weight and pipetting force helping to avoid hand and arm strain.

- magnet-assisted piston for consistently precise results
- innovative spring and seal design for one of the lowest plunge force requirements
- durable tip ejector made of stainless steel with a unique silicon shock-absorbing mechanism
- ergonomic design with proper weight distribution
- volume lock setting
- large & clear 4-digit display
- precise volume setting
- highly durable PVDF tip cone
- made of highly durable material for protection against chemical corrosion and physical shocks
- UV resistant and fully autoclavable at 121°C for 20 minutes
- color coding for easy identification
- universal tip compatibility
- calibrated per ISO 8655-6 in ISO 17025 accredited lab
- 3 year warranty

Volume range μl	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0,1-2,5	2.5	0.7	1	4760001
0,5-10	1.0	0.4	1	4760002
2-20	0.9	0.3	1	4760003
5-50	0.6	0.3	1	4760004
10-100	0.8	0.2	1	4760005
20-200	0.6	0.2	1	4760006
100-1000	0.6	0.2	1	4760007
500-5000	0.6	0.2	1	4760008
1000-10000	0.6	0.15	1	4760009

Slamed Precision 8-channel Pipette

Volume range μl	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0,5-10	2.0	1.0	1	4760010
2-20	2.0	1.6	1	4760011
5-50	1.0	0.7	1	4760012
10-100	0.8	0.3	1	4760013
20-200	0.7	0.25	1	4760014
30-300	0.6	0.3	1	4760015

Slamed Precision 12-channel Pipette

Volume range μl	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0,5-10	2.0	1.0	1	4760016
2-20	2.0	1.6	1	4760017
5-50	1.0	0.7	1	4760018
10-100	0.8	0.3	1	4760019
20-200	0.7	0.25	1	4760020
30-300	0.6	0.3	1	4760021



Slamed Single Channel Pipette L



Slamed Single Channel Pipette L

The Pipette L meets all the demands for sterile liquid handling in microbiological and molecular biological laboratories. It is fully autoclavable and resistant to UV light. Easy volume setting by turning the pushbutton avoids jamming the gloves in the knurled screw.

Low spring forces of pipetting stroke and tip ejector accommodate the daily work without hand fatigue. With ten pipette models, the volume range is covered from 0.1 µl up to 10 ml.

- perfect measuring results
- directive calibration ISO 8655
- fully autoclavable and UV-light resistant
- volume setting by turning the pushbutton
- grooved handle reduces the influence of hand warmth
- fatigue-free operation because of the ergonomically designed handle and reduced spring forces
- adjustable length of the tip ejector enables the use of any brand of pipette tips
- maintenance free: components are manufactured from stainless steel and chemical-resistant plastic
- filters in the shafts protect the 5 ml and 10 ml pipette against overfilling and contamination
- 3 year warranty

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
0.1-2	L2	+1.5	0.7	1	4770001
0.5-10	L10	+0.5	0.4	1	4770002
2-20	L20	+0.8	0.3	1	4770003
5-50	L50	+0.8	0.4	1	4770004
10-100	L100	+0.8	0.2	1	4770005
20-200	L200	+0.6	0.2	1	4770006
50-250	L250	+0.6	0.3	1	4770007
100-1000	L1000	+0.6	0.15	1	4770008
1000-5000	L5000	+0.5	0.15	1	4770009
1000-10000	L10000	+0.5	0.2	1	4770010

Slamed Fix Volume Pipette CP



Slamed Fix Volume Pipette CP

Fixed volume pipette with tip ejector. For every laboratory in every field. Highest performance for the best price.

12 Pipette CP models within the range of 5 to 1000 µl.

- excellent precision and accuracy in the measurement of liquids
- directive calibration ISO 8655
- ergonomic design of handle for easy and pleasant work
- easy removal of tip ejector when working with narrow test tubes
- piston made of chemically resistant material
- built-in special system eliminating pipetting error
- maintenance free
- fully autoclavable and UV light resistant
- individual quality certificate with each unit
- the pipette is made of materials resistant to corrosive agents
- 3 year warranty

Volume range µl	Model	Accuracy < ± %	Precision < %	Quantity per Pack	Order No.
5	CP5	2.0	1.0	1	4770032
10	CP10	1.2	0.5	1	4770034
20	CP20	0.9	0.4	1	4770036
25	CP25	0.9	0.4	1	4770037
40	CP40	0.9	0.3	1	4770039
50	CP50	0.9	0.3	1	4770041
100	CP100	0.9	0.3	1	4770047
150	CP150	0.7	0.3	1	4770049
200	CP200	0.6	0.2	1	4770050
250	CP250	0.6	0.2	1	4770053
500	CP500	0.6	0.2	1	4770057
1000	CP1000	0.6	0.2	1	4770063

Slamed Multichannel Pipette ME/MT and Pipette Stand

Slamed Multichannel Pipette ME/MT

The fully autoclavable Pipette ME/MT are specially designed for working with gloves under sterile conditions. The volume range from 1 µl to 300 µl is covered by 4 models each in the 8- and 12-channel versions.

The patented manifold system ensures individual tight sealing of the pipette tips on each channel.

- perfect measuring results
- directive calibration ISO 8655
- fully autoclavable and UV-light resistant
- volume settings by turning the pushbutton to avoid snatching the gloves
- ergonomic design, the handle can be turned into an individual convenient position
- patented system makes manual corrections of the tip sealing redundant
- maintenance free: components are manufactured from stainless steel or chemical-resistant plastics
- each pipette comes with a quality certificate, holder and calibration key
- 3 year warranty

Slamed 8-channel Pipette ME

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
1-10	ME10	2.0	1.2	1	4770064
5-50	ME50	1.6	0.6	1	4770065
20-200	ME200	1.0	0.6	1	4770066
50-300	ME300	1.0	0.6	1	4770067

Slamed 12-channel Pipette MT

Volume range µl	Model	Accuracy max. vol %	Precision < %	Quantity per Pack	Order No.
1-10	MT10	2.0	1.2	1	4770068
5-50	MT50	1.6	0.6	1	4770069
20-200	MT200	1.0	0.6	1	4770070
50-300	MT300	1.0	0.6	1	4770071

Slamed Pipette Stands

Convenient and safe storage of pipette.

- rotating stand for up to 6 pipettes
- pipette stand made of plexiglass for up to 4 pipettes as well as for multichannel pipettes

Product	Fig. No.	Quantity per Pack	Order No.
Pipette stand for 6 pipettes	1	1	9420029
Pipette stand for 4 pipettes	2	1	9420026
Pipette stand for 1 pipette	3	1	9420027





ratiopetta®

Pipetting is one of the most frequently used applications in laboratories.

This is not only where precision and reliability are important, users also need products that are ergonomic, light and convenient. The ratiopetta® from ratiolab® meets these demands while offering outstanding value for money.

- obtainable in volumes from 0.1 µl – 5000 µl
- fully autoclavable at 121 °C, 20 minutes
- universal cone for standard pipette tips
- easy volume setting by the smooth-running setting ring
- fatigue-free work possible for the analyst over longer pipetting series
- touch-sensitive pressure points for pipetting and discharging
- modern, innovative materials
- individual checking according to ISO8655/DIN12650
- delivery includes a test certificate
- individual serial numbers
- suitable for right- and left-handers
- easy to calibrate
- corrosion-resistant piston and tip ejector
- 2 year warranty

Delivery includes:

- pipette
- certificate of calibration
- operating instructions
- bench rack
- calibration key
- lubricant

Matching pipette tips can be found on pages 31-37.





ratiopetta® Single Pipette

Volume Range µl	Accuracy < ± %	Precision < %	Quantity per Pack	Order No.
0.1 – 2.5	3.00	3,00	1	4780025
0.5 – 10	1.50	1.50	1	4780010
2.0 – 20	1.20	1,00	1	4780020
10 – 100	1.00	0.40	1	4780100
20 – 200	0.80	0.40	1	4780200
100 – 1000	0,70	0.25	1	4781000
1000 – 5000	0.60	0.30	1	4785000



ratiopetta® 8-channel Pipette

Volume Range µl	Accuracy < ± %	Precision < %	Quantity per Pack	Order No.
0.5 – 10	2.50	2.50	1	4780018
5.0 – 50	1.50	1.00	1	4780058
50 – 300	1.00	0.50	1	4780308

ratiopetta® 12-channel Pipette

Volume Range µl	Accuracy < ± %	Precision < %	Quantity per Pack	Order No.
0.5 – 10	2.50	2.50	1	4780012
5.0 – 50	1.50	1.00	1	4790052
50 – 300	1.00	0.50	1	4790302

Matching pipette tips can be found on pages 31-37.



ratiopetta® Pipettor stands

- for the clearly laid out storing of up to 5 pipettors of different brands with finger rest
- compatible with most multi-channel-pipettors with finger rest

Product	Quantity per Pack	Order No.
pipettor stand for ratiopetta®	1	9420024

Thermocult Incubator



Thermocult Incubator

Compact incubator for bacteriology. Fixed temperature setting at $35 \pm 2^\circ\text{C}$, adjustable up to 42°C , with built-in control thermometer.

Crystal-clear plastic door for visual control. The incubator can be placed on work benches or set up on walls.

- digital control thermometer
- two indicator lights for electricity and temperature
- inside size (W x D x H): 210 x 145 x 110 mm, for up to 20 tissue cultures or 8 petri dishes
- outside size (W x D x H): 300 x 170 x 150 mm
- weight: approx. 1.3 kg, power: 230 V, 30 W
- shelf available separately
- CE certified
- 2 year warranty

Product	Quantity per Pack	Order No.
Thermocult Incubator	1	9022000
shelf	1	9022001

5-Channel Coagulometer CC-4000

Coagulometer CC-4000

We present the 5 channel coagulometer CC -4000 which executes every coagulational determination by chronometrical method, method of the usage of chromogenic substrate and immunochemical method (D-dimer).

Range of Determinations:

1. Basic coagulology:

- PT (time, index PT, index Quick, INR, Fibrinogen with PT)
- APTT (time, ratio)
- TT (time, ratio)
- Fibrinogen (Clauss method - g/l, mg/dl)
- Factors.

2. Chromogenic substrate:

- AT III (% activity)
- Plasminogen
- Protein C
- Alfa-2-antiplasmin (α_2 -AP)

3. D-Dimer

- ($\mu\text{g/l}$)

For all determinations the tested material (sample) is taken and prepared as in case of the typical coagulational determinations.

- measurements: length of the light wave: 405 nm, „micro-method“ - 50 μl of the sample and the reagents
- automatic reading of the result
- automatic zero rotation
- storage of 4000 final results, 34 various calibration curves and referential values in the memory supply after the disconnection
- automatic systems of the turbidity compensation (the possibility of the determination of lipemic, hemolysed and icteric plasmas)
- compensation of the sample and cuvette fogging
- short period of the determination for substrata and D-dimer: 30-180s
- programming of the measures, types of results and prints
- display: graphic in English, 4 stop-watches of the incubation, built-in clock with date-marker, „Stand-by“ functions
- printer: built-in quick thermal printer 110 mm, printing of the summary, field results, calibration curves, course of the reaction, control and norms time, indexation of the beyond standards
- interface RS232 for network connection
- connector USB for barcode reader
- dimensions and weight: 43 x 37 x 12 cm, 5 kg
- 500 cuvettes included
- CE certified
- 2 year warranty

Product	Quantity per Pack	Order No.
Coagulometer CC-4000	1	9022028
Test cuvettes	1000	9022030



Slamed Bottle-Top Dispensers



Slamed Bottle-Top Dispenser

Bottle-Top Dispenser for accurate and rapid dispensing of small and large volumes directly from any original reagent bottle. The precise bottle dosing apparatus with outparallax errors in volume adjustment.

Five models within the range 0.25ml to 50 ml

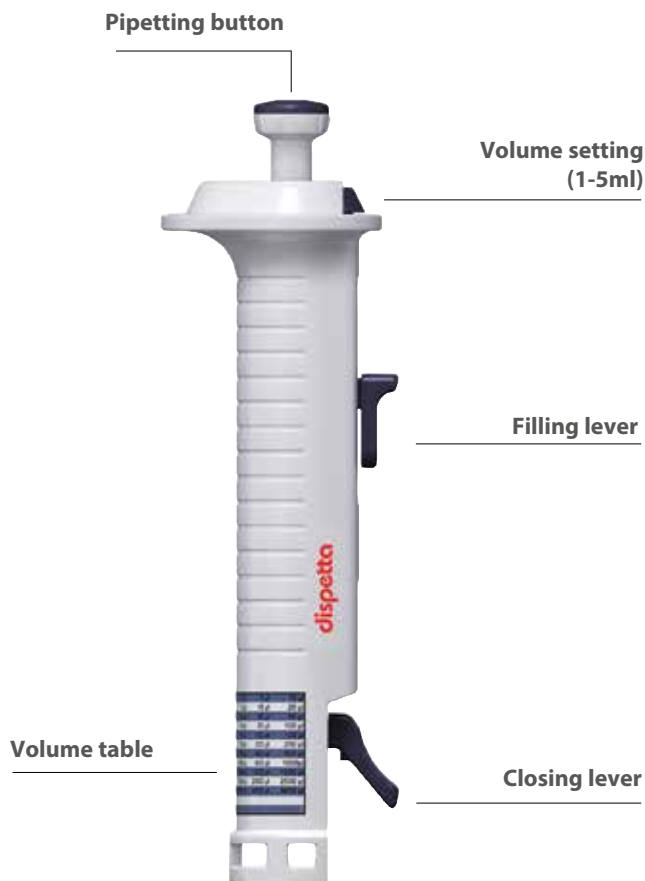
- easy and reliable volume adjustment, protected against unintended alteration
- the valve block is 360° rotatable
- 100% drip free system for your safety at work: just turn the discharge tube at 180° to drain it and avoid the further uncontrolled flow of liquid
- fully autoclavable at 121 °C, can be completely disassembled for cleaning
- the components directly in contact with the reagent are made of chemical resistant materials: platinum spring, ceramic valve balls, PTFE piston, borosilicate glass 3.3 cylinder
- use for nearly all liquids
- do not use for PTFE swelling solvents, hydrofluoric acid, chemical solutions which react with platinum-iridium alloys
- each device is tested individually and delivered with conformity certificate
- including thread adaptors GL28, 38, 40 and 45
- supplied without bottle
- 2 year warranty

Volume settings ml	Model	Dispensing Steps ml	Inaccuracy A % ¹	Imprecision CV % ¹	Quantity per Pack	Order No.
0.25-2.5	D1	0,05	0,6	≤0,1	1	2970001
0.5-5	D2	0,10	0,5	≤0,1	1	2970002
1-10	D3	0,20	0,5	≤0,1	1	2970003
2.5-25	D4	0,50	0,5	≤0,1	1	2970004
5-50	D5	1,00	0,5	≤0,1	1	2970005
1-10	HF ²	0,20	0,5	≤0,1	1	2970015

¹ from the nominal volume

² for Hydrogen Fluoride & Hydrofluoric Acid

Dispetta Dispenser and Pipetting Aid



Ultra-light with
185 grams



ratiolab® Dispetta Pipettor for Serial Dispensing

The convenient and robust instrument for serial dispensing with Dispenser Tips.
Five volume settings combined with seven Dispenser Tip sizes result in 35 different volumes from 10 µl to 5 ml.
The Dispenser Tip is filled similar to a syringe. After preselecting the dispensing volume the pipetting button has to be pressed for each dispensing step.

- ergonomic design and lightweight for convenient handling
- smooth and fatigue-free operation even with long series
- precise and convenient volume setting
- clearly visible volume adjustment, optimized readability
- table with a volume scale fixed directly onto the instrument
- precise gear mechanism for accurate and reproducible pipetting
- safe, rapid and easy exchange of Dispenser Tips
- maintenance-free
- long life due to robust design
- manual dispenser without electronic parts
- 2 year warranty

Suitable dispenser tips: see page 43.

Product	Quantity per Pack	Order No.
ratiolab® dispetta dispenser	1	2980200

ratiolab® Accupetta Electronic Pipetting Aid

- can fill a 25 ml pipette in less than 4 seconds
- safety valve and hydrophobic filters provide double protection against fluid penetration
- two different speed modes – high & low along with gravity drain
- the pump speed can also be fine-tuned by varying finger pressure on operating knobs for better control of speed
- cadmium-free environment-friendly NiMH batteries
- intelligent charger prevents over-charging / heating of batteries
- low battery indicator, power 2 x 1.2 V / 1000 mAh
- battery service life: 8 hours continuous use
- battery charging time: 2 – 3 hours
- volumetric range: plastic or glass pipette from 0.1 ml to 100 ml
- autoclavable pipette cone
- 2 year warranty

Order No. 3200300 Accupetta contains: 1x Accupetta, 2x Rechargeable battery, 1x Adapter for battery charger, 2x Spare filter 0,45 µm, 1x Wall mount for Accupetta.

Suitable serological pipette: see page 38.

Product	Quantity per Pack	Order No.
ratiolab® Accupetta	1	3200300
Accessories:		
Spare silicone pipette adapter	1	3200301
Spare filter hydrophobic, non-sterile, 0.2 µm	1	3200302
Spare filter hydrophobic, non-sterile, 0.45 µm	1	3200303
Battery for Accupetta, set of 2	1	3200306
Battery charger for Accupetta	1	3200309
Adapter for battery charger	1	3200311
Wall mount for Accupetta	1	3200312

Liquid handling



Think! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Pipetting Reservoirs

Pipetting reservoirs

The ratiolab® pipet reservoirs made of white polystyrene (PS) are ideal for the repetitive filling of single and multi-channel pipette.

Because of the innovative design, these disposable items are both space-saving and stackable. Their broad edges give them a firm and safe stand. They are thus an uncomplicated and clean alternative to reusable reservoirs. The material is recyclable.

This product line is available in three application-oriented versions:

Version -Figure- 1

- single reservoir with max. volume 50 ml
- angled bottom for practically complete withdrawal of sample and hence economical in use
- groove graduations at 10, 15, 20 and 25 ml
- labeling area

Version -Figure- 2

- extra large single reservoir with max. volume 100 ml
- graduations at 50 and 100 ml
- conical bottom for economy due to minimum loss of medium

Version -Figure- 3

- specially designed for use with 8-channel pipette
- 8 separate channels of 6 ml volume (= 48 ml total)

Versions 1–3 are available gamma-sterilized or non-sterile.

Pipetting reservoirs made of PS

Volume	Fig. No.	Sterilized	Quantity per Pack	Order No.
50 ml	1	–	bags 20 x 5	9420018
50 ml	1	■	bags 20 x 5	9425518
100 ml	2	–	bags 20 x 5	9420017
100 ml	2	■	bags 20 x 5	9425517

Pipetting reservoirs made of PS for 8-channel precision pipetting

Volume	Fig. No.	Sterilized	Quantity per Pack	Order No.
6 ml	3	–	bags 20 x 5	9420016
6 ml	3	■	bags 20 x 5	9425516



Pipette Tips

Pipette tips

ratiolab® pipette tips are ideal for all commercially available pipette. Their uniform high quality and precision make today's pipette fully effective. Using the pre-filled Multirack advanced or the Refill System,

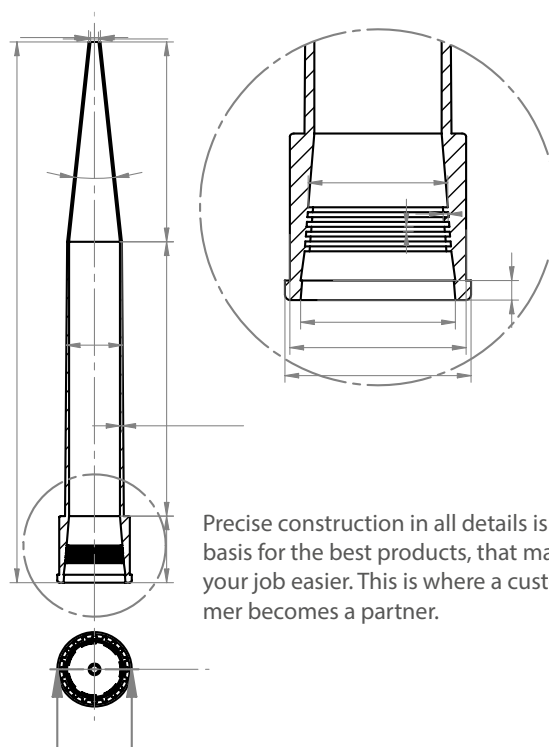


the latter comprising a ratiolab® Multibox plus advanced or Multibox ultra advanced with suitable pipette tips in the MultiTray® advanced, makes professional pipetting simple and safe at any time. Our pipette tips perfectly fit manual or electronic, single or multichannel pipette.

Precision in each and every detail – a guarantee for the highest quality.

- made of high-quality polypropylene
- tight fit due to precisely fitting cone
- optimal handling due to stable shape
- autoclavable
- guaranteed dust-free due to special ionization treatment
- available pre-sterilized or non-sterile
- excellent transparency due to high-quality surfaces
- minimal residual wetting due to controlled quality of raw materials
- excellent volume accuracy due to precise tip orifice
- practice-oriented tip volumes
- aroject® tips with special filters made of hydrophobic HD-PE as an aerosol barrier and for protection against contamination
- suitable for all commonly used pipette types

This is why ratiolab® pipette tips always provide perfect results.



Precise construction in all details is the basis for the best products, that makes your job easier. This is where a customer becomes a partner.

Pipette Tips System and Refill System



Pipette Tips System **New**

Multirack advanced

The ratiolab® Multiracks advanced provide even more time-saving, perfect hygienic conditions and simple operation.

- the pipette tips are placed on a robust matrix, in an 8 x 12 format for all tips
- the tips can be picked up by 1, 8 or 12-channel pipettors as well as by pipetting robots contamination-free and without any hand contact
- the Multiracks advanced are durable and steady, and the hinged cover can be opened up to 180°
- after work, the Multiracks advanced can be closed firmly through a click closure to protect the tips from dust
- the Multiracks advanced are completely autoclavable at 121 °C, 20 minutes
- Multiracks advanced are available in sterile and non-sterile packs

Order information on pages 32-35.

Pipette Tips Refill System **New**

Multibox®plus advanced and -ultra advanced / MultiTray® advanced System

The ratiolab® Multibox®plus advanced and -ultra advanced / MultiTray® advanced system simplifies pipette tips handling and provides more safety.

MultiTray® advanced, the dust-proof refill packs made of plastics for ratiolab® pipette tips, hold the tips in plastic matrices. Up to five plastic matrices filled with tips are stacked on top of each other in the space-saving MultiTray® advanced.

The matrices contain 96 pipette tips in the 8 x 12 standard format. The matrices can simply be removed from the Multibox® advanced with the two-finger tabs.

The MultiTray® advanced matrices fit securely into the Multibox®plus advanced and -ultra advanced with a soft click. The framework of the Multibox®plus advanced and -ultra advanced provides full support for the MultiTray® advanced matrices – resulting in convenient and safe tip pick-up, even with 8- and 12-channel pipettors. For tip removal, the dustproof, hinged cover of the Multibox®plus advanced and -ultra advanced may be opened completely or partially by using the additional sliding mechanism. For cleaning the lid can be removed.

The ratiolab® Multibox®plus advanced and -ultra advanced / MultiTray® advanced system is space- and cost-saving. It reduces the amount of waste and provides more convenient and safe pipetting and sterilization.



Pipette Tips Refill System



Multibox® plus advanced and -ultra advanced for MultiTray® advanced pipette tips

Reusable pipette tip boxes for the ratiolab® MultiTray® advanced refill systems.

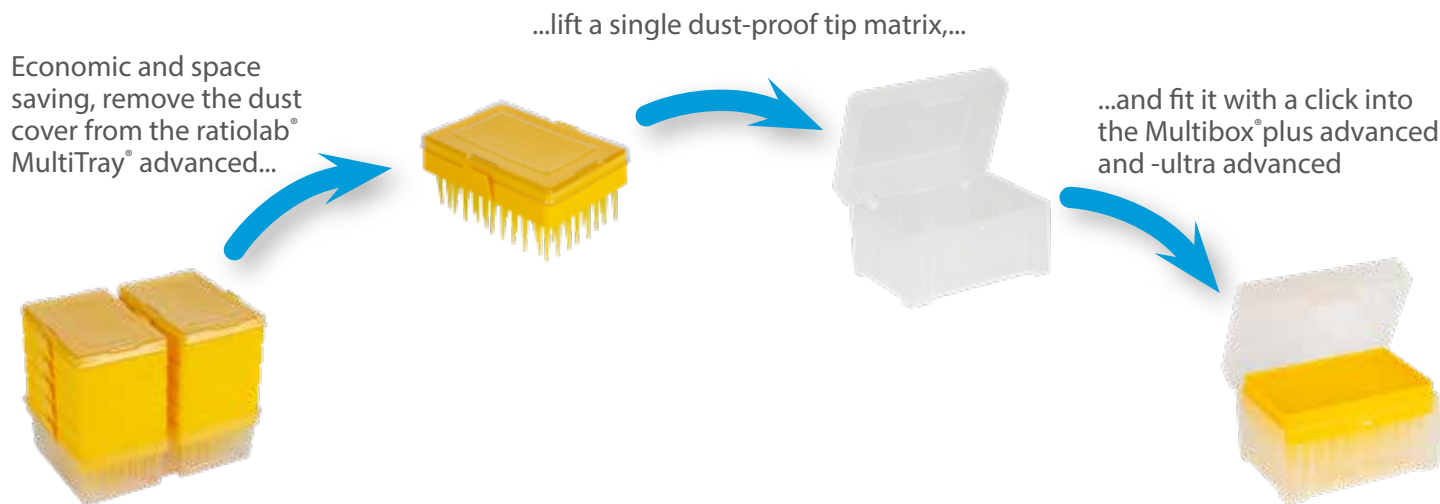
- Multibox® plus advanced, PC, with dust-proof hinged and sliding lid, completely removable
- Multibox® ultra advanced, PP, with hinged lid
- can be autoclaved several times at 121 °C, 20 min
- quantity per pack: 1 pc.
- scope of delivery: Multibox® plus advanced or -ultra advanced without MultiTray® advanced and without pipet tips

Product	Fig. No.	Volume	Order No.
ratiolab® Multibox® plus, advance PC, empty, for all MultiTray® advanced pipette tips	1	up to 1.200 µl	8010161
ratiolab® Multibox® ultra advance PP, empty, for all MultiTray® advanced pipette tips	2	up to 300 µl	New 8030140
ratiolab® Multibox® ultra advance PP, empty, for all MultiTray® advanced pipette tips	3	up to 1.200 µl	New 8030150

MultiTray® advanced for Multibox® plus advanced and Multibox® ultra advanced

- dust-proof refill pack with several plastic matrices filled with tips
- the most functional, environmentally friendly, space and cost-saving packaging
- autoclavable up to 121 °C

Order information on pages 31-33.



Pipette Tips

Pipette Tips

Type	Volume Range µl	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Crystal pipette tip "E", for ratiopetta®, slamed® and all commonly used pipette 	0,5-20	45,80	bag 1x1000	1	1000	2500170
			Multirack advanced 10x96	2	960	New 2514172
			Multirack advanced, sterilized 10x96	2	960	New 2554172
			MultiTray® advanced 10x96	3	960	New 2540172
Crystal pipette tip "G", for ratiopetta®, slamed® and all commonly used pipette 	0,1-10	31,30	bag 1x1000	1	1000	2500190
			Multirack advanced 10x96	2	960	New 2514192
			Multirack advanced, sterilized 10x96	2	960	New 2554192
			MultiTray® advanced 10x96	3	960	New 2540192
Crystal pipette tip xl, for ratiopetta®, slamed® and all commonly used pipette 	0,1-10	45,50	bag 1x1000	1	1000	2100500
			Multirack advanced 10x96	2	960	New 2514502
			Multirack advanced, sterilized 10x96	2	960	New 2554502
			MultiTray® advanced 10x96	3	960	New 2540502
Yellow pipette tip "E", for ratiopetta®, slamed® and all commonly used pipette 	1-200	49,50	bag 1x1000	1	1000	2100600
			Multirack advanced 10x96	2	960	New 2114602
			Multirack advanced, sterilized 10x96	2	960	New 2154602
			MultiTray® advanced 10x96	3	960	New 2140602
Colorless pipette tip "E", for ratiopetta®, slamed® and all commonly used pipette 	1-200	49,50	bag 1x1000	1	1000	2400600
			Multirack advanced 10x96	2	960	New 2414602
			Multirack, advanced sterilized 10x96	2	960	New 2454602
			MultiTray® advanced 10x96	3	960	New 2440602
Pipette tip "Oxford", for all commonly used pipette 	1-200	65,30	bag 1x1000	1	1000	2500110
Pipette tip "MLA", for all commonly used pipette 	1-200	47,50	bag 1x1000	1	1000	2500140



1



2



3

Pipette Tips



Scan here for pipette tips
compatibility chart

Pipette Tips

Type	Volume Range µl	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Pipette tip "wide bore", for all commonly used pipette, ratiopetta®	1-200	50,50	bag 1x1000	1	1000	2100553
Yellow pipette tip "universal", for ratiopetta®, slamed® and all commonly used pipette	1-250	51,20	bag 1x1000	1	1000	2500160
			Multirack advanced 10x96	2	960	2514162
			Multirack advanced, sterilized 10x96	2	960	2554162
			MultiTray® advanced 10x96	3	960	2540162
Colorless pipette tip "universal", for ratiopetta®, slamed® and all commonly used pipette	1-250	50,00	bag 1x1000	1	1000	2500163
			Multirack advanced 10x96	2	960	2514163
			Multirack advanced, sterilized 10x96	2	960	2554163
			MultiTray® advanced 10x96	3	960	2540163
Blue pipette tip "E", for ratiopetta®, slamed® and all commonly used pipette	100-1200	70,94	bag 1x1000	1	1000	2100610
			Multirack advanced 10x96	2	960	2114612
			Multirack advanced, sterilized 10x96	2	960	2154612
			MultiTray® advanced 10x96	3	960	2140612
Colorless pipette tip "E", for ratiopetta®, slamed® and all commonly used pipette	100-1200	70,94	bag 1x1000	1	1000	2400610
			Multirack advanced 10x96	2	960	2414612
			Multirack advanced, sterilized 10x96	2	960	2454612
			MultiTray® advanced 10x96	3	960	2440612
Pipette tip "MLA", for all commonly used pipette	100-1000	86,30	bag 1x1000	1	1000	2500150



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3

Pipette Tips

Pipette Tips

Type	Volume Range µl	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Pipette tip “wide bore”, for ratiopetta®, slamed® and all commonly used pipette	100-1000	88,84	bag 1x1000	1	1000	2100555
Pipette Tip Dr. Lange, for Dr. Lange Pipette	100-1000	86,30	bag 1x1000	1	1000	2500130
Pipette Tip, for ratiopetta®, slamed® and all commonly used pipette	50-1250	104,00	bag 1x500	1	500 New	2400660
Colorless pipette tip “ES”, for pipette Socorex Calibra®	500-2500	115,00	bag 1x250	1	250	2500180
Pipette Tip “Finntip”, for pipette Thermo Scientific®, Dr. Lange®, Brand®	1000-5000	147,60	box 1x75	4	75	2400620
			bag 1x1000	1	1000	2400622
			bag 1x3000	1	3000	2400623
			bag 1x500	1	500	2400624
			rack 1x50	5	50	2410620
			rack, sterilized 1x50	5	50	2453620
Pipette Tip “Makro”, for pipette Eppendorf Research® Plus, Gilson®, Pipetman®	1000-5000	119,70	bag 1x250	1	250	2400630
			rack 1x50	6	50	2410630
			rack, sterilized 1x50	6	50	2453630



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4



5



6



Scan here for pipette tips
compatibility chart

Pipette Tips

Type	Volume Range µl	Length mm	Packaging	Fig. No.	Quantity per Pack	Order No.
Pipette Tip "Makro II", for ratiopetta [®] , Socorex Accura [®]	1000-5000	126,00	bag 1x300	1	300	2400650
			rack 1x50	5	50	2410650
			rack, sterilized 1x50	5	50	2453650
Pipette Tip "Makro III", for pipette Eppendorf Research [®] plus	1000-5000	133,30	bag 1x300	1	300	2400653
			rack 1x50	5	50	2410653
			rack, sterilized 1x50	5	50	2453653
Pipette Tip „Makro IV“, for Slamed [®] Precision and Gilson [®]	1000-5000	124,00	bag 1x250	1	250	2400655
Pipette Tip colorless, for Slamed [®] Precision and Eppendorf [®] Pipette	1000-10000	161,00	bag 1x200	1	100	2400645
Pipette Tip "Finntip", for pipette Thermo Scientific [®] , Socorex Acura [®] , Gilson [®]	2000-10000	150,20	bag 1x100	1	100	2400640
			rack 1x25	5	25	2410640
			rack, sterilized 1x25	5	25	2453640
Pipette Tip, for Pipette Brand [®] , Socorex Acura [®] , Gilson [®]	1000-10000	153,60	bag 1x100	1	100	2400642
			rack 1x25	5	25	2410642
			rack, sterilized 1x25	5	25	2453642



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6

aeroject® ultra Pipette Filter Tips

free of RNase-, DNase-, DNA, ATP-,
pyrogens, and PCR inhibitors-,
Low Retention



aeroject® ultra filter tips – Pipette Tips with Aerosol Barrier

Pipette tips with special filters, to effectively prevent the pipettor shaft from contamination with aerosols and liquids to be sucked into the pipettor.

- sterilized
- free of RNase, DNase, pyrogens and ATP
- free of human DNA and PCR inhibitors
- pipette tips and aerosol filters made of ultra-hydrophobic HD-PE
- minimized retention due to special surface treatment
- perfect and tight fit on all major pipettor brands
- aroject® ultra 1770010 and 1771000xl with extended length for operation with narrow vessels and reduced risk of cross-contamination
- packed in plastic racks with hinged lids

Type	Volume Range µl	Length mm	Packaging	Quantity per Pack	Order No.
Pipette Tip aroject® ultra tips xl, for all commonly used pipette, ratiopetta®	0,1-10	45,60	Racks 10 x 96	960	1770010
					
Pipette Tip aroject® ultra tips, for all commonly used pipette, ratiopetta®	1-20	50,80	Racks 10 x 96	960	1770020
					
Pipette Tip aroject® ultra tips, for all commonly used pipette, ratiopetta®	1-100	50,80	Racks 10 x 96	960	1770100
					
Pipette Tip aroject® ultra tips, for all commonly used pipette, ratiopetta®	1-200	50,80	Racks 10 x 96	960	1770200
					
Pipette Tip aroject® ultra tips, for all commonly used pipette, ratiopetta®	100-1000	86,00	Racks 10 x 96	960	1771000xl
					

aeroject® eco Pipette Filter Tips

Reduce your
plastic waste!



aeroject® eco filter tips – Pipette Tips with Aerosol Barrier

Pipette tips aeroject® eco with special filters, to effectively prevent the pipettor shaft from contamination with aerosols and liquids to be sucked into the pipettor.

- sterilized
- free of RNase, DNase, pyrogens and ATP
- free of human DNA and PCR inhibitors
- pipette tips and aerosol filters made of ultra-hydrophobic HD-PE
- minimized retention due to special surface treatment
- perfect and tight fit on all major pipettor brands
- aeroject® eco 1720010 and 1721000 with extended length for operation with narrow vessels and reduced risk of cross-contamination
- packed in sustainable cardboard box

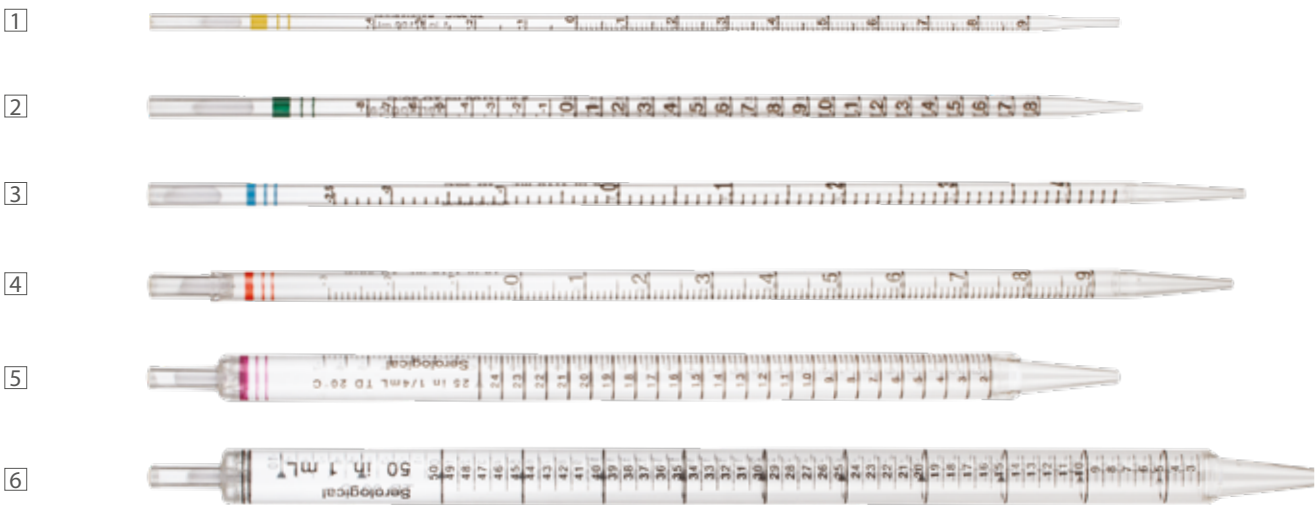
Type	Volume Range µl	Length mm	Packaging	Quantity per Pack	Order No.
Pipette Tip aeroject® ultra tips xl, for all commonly used pipette, ratiopetta®	0,1-10	45,60	Racks 10 x 96	960	New 1720010
					
Pipette Tip aeroject® ultra tips, for all commonly used pipette, ratiopetta®	1-20	50,80	Racks 10 x 96	960	New 1720020
					
Pipette Tip aeroject® ultra tips, for all commonly used pipette, ratiopetta®	1-100	50,80	Racks 10 x 96	960	New 1720100
					
Pipette Tip aeroject® ultra tips, for all commonly used pipette, ratiopetta®	1-200	50,80	Racks 10 x 96	960	New 1720200
					
Pipette Tip aeroject® ultra tips, for all commonly used pipette, ratiopetta®	100-1000	86,00	Racks 8 x 96	768	New 1721000
					

Serological Pipette

Serological Pipette

Crystal-clear polystyrene (PS).

- free of RNase, DNase, DNA, pyrogens
- non-toxic, TSE/BSE free
- permanent black-embossed graduations
- with color-coded ring for convenient identification, standard color code
- sterile, individually packed
- packed: plastic/paper
- negative graduation for additional capacity
- accuracy is +/- 2-3%.
- with cotton plug



Positive Volume ml	Fig. No.	Negative Volume ml	Graduation ml	Length mm	Quantity per Pack	Order No.
1	1	0.04	0.01	279.40	1000	3101011
2	2	0.08	0.01	282.58	1000	3102011
5	3	2.5	0.1	348.15	200	3105011
10	4	3.0	0.1	346.81	200	3110011
25	5	7.0	0.25	310.90	200	3125011
50	6	10.0	1.0	368.17	100	3150011

Sterilizing Pipette Box



Sterilizing Pipette Box

Aluminium.

Pipette boxes with optimized easy handling in every day's work. The cylindrical pipette boxes are the best option for autoclaving various glass items with a length from 150 to 480 mm like mixing rods, Pasteur, volumetric, and graduated pipette.

- autoclavable at 134 °C, 20 minutes
- autoclaving: the new construction guarantees the entrance of steam into the container and optimizes the process of autoclaving
- opening and closing: soft sliding performance of the top section onto the base section facilitates work
- base and top section are filled with a silicon layer at the bottom as a shock absorber to protect the glass items from splintering
- the sterilizing pipette boxes are available in 4 various lengths
- bottom: inside dimensions: 60 x 60 mm, external dimensions: 62 x 62 mm
- top: inside dimensions: 62,75 x 62,75 mm, external dimensions: 68,70 x 68,70 mm

Stainless steel holder for 4 ratiolab® pipette boxes

- for practical storage of up to 4 pipette boxes
- space-saving and safe storage of pipette boxes
- size D x W x H: 265 x 250 x 120 mm

Product	Length mm	Quantity per Pack	Order No.
Pipette box	160-200	1	3170200
Pipette box	235-305	1	3170305
Pipette box	315-385	1	3170385
Pipette box	315-485	1	3170485
Pipette box holder	-	1	3170100

Pasteur-Plast Pipettes

Pasteur-plast pipettes

Pasteur-plast pipettes render liquid handling simple and safe. Cross-contamination and carry-over simply cannot occur making so tedious clean-ups unnecessary. In addition, there is no risk of glass breakage with the resulting danger of infectious material escaping. The Pasteur-plast pipettes are made of transparent polyethylene. They are inert to biological fluids and most acids. The low affinity of the surface reduces the loss of cells and valuable proteins through binding.

- soft, elastic bulb
- unbreakable – thus reducing the risk of glass injury
- burr-free orifice for neat, clean and precise dispensing
- only externally graduated Pasteur-plast pipettes with clearly visible embossed graduations
- sterile Pasteur-plast pipettes are gas-sterilized and individually packaged
- BSE-free
- can be used for food
- made of LD-PE
- usable up to medium temperature 70°C



Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
0.1	[1]	0.1	–	–	–	82	–	–	1000	2600260
0.2	[2]	0.25	–	–	–	130	40±4	–	500	2600145
0.25	[3]	0.2	0.45	–	–	125	20±2	–	1000	2600290
0.5	[4]	0.5	1.5	0.5	■	85	25±3	–	1000	2600125
0.8 Mini	[5]	0.8	2	0.5	■	112	25±3	–	1000	2600230
0.8 Mini	[5]	0.8	2	0.5	■	112	25±3	■	500 x 1	2655230
1.0 Mini Plus	[6]	0.8	1.8	–	–	114	25±3	–	1000	2600270
1.0 Micro	[7]	1	5	–	–	149	50±5	–	500	2600240
1.0 Micro	[7]	1	5	–	–	149	50±5	■	500 x 1	2655240
1.0 Kapillare	[8]	0.5	1.5	–	–	104	50±5	–	400	2600155
1.0	[9]	1.0	5.5	1	■	153	30±3	–	500	2600171
1.0	[9]	1.0	5.5	1	■	153	30±3	■	500 x 1	2655171
1.0	[9]	1.0	5.5	1	■	153	30±3	■	50 x 10	2656171

Pasteur-Plast Pipettes

10



11



12



13



Especially for urine analysis

14



15



16



17



Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
1.0	10	1.0	3.5	1	■	140	25±3	–	500	2600119
1.0 Kapillare	11	1.0	5.5	1	■	150	50±5	–	500	2600181
1.0 Kapillare	11	1.0	5.5	1	■	150	50±5	■	500 x 1	2655181
1.2	12	1.2	–	–	–	63	–	–	500	2600160
1.3	13	1	–	–	–	140	25±3	–	500	2600220
1.5	14	2	6	1.5	■	228	22±2	–	400	2600120
1.5	14	2	6	1.5	■	228	22±2	■	250 x 1	2655120
2.0	15	2.0	5	2	■	152	25±3	–	500	2600135
2.0	15	2.0	5	2	■	152	25±3	■	500 x 1	2655135
2.0	15	2.0	5	2	■	152	25±3	■	50 x 10	2656135
2.5 Micro Tip	16	1.5	4	–	–	134	50±5	–	500	2600280
2.5	17	2.5	6.5	2.5	■	152	25±3	–	500	2600131
2.5	17	2.5	6.5	2.5	■	152	25±3	■	500 x 1	2655131

Pasteur-Plast Pipettes



Volume ml	Fig. No.	Volume without ball (ml)	Vol. with ball (ml)	Scaling/ Volume	Graduation	Length mm	Drops per ml	Sterilized	Quantity per Pack	Order No.
3.0	18	3	7	3	■	160	25±3	–	500	2600250
3.0 Makro	19	3.0	7	3	■	158	25±3	–	500	2600111
3.0 Makro	19	3.0	7	3	■	158	25±3	■	500 x 1	2655111
3.0 Makro	19	3.0	7	3	■	158	25±3	■	50 x 10	2656111
3.0 Mikro	20	0.1	3.7	–	–	152	30±3	–	500	2600151
3.0 Mikro	20	0.1	3.7	–	–	152	30±3	■	500 x 1	2655151
4.0	21	0.05	4.05	–	–	86	30±3	–	500	2600165
4.0	22	3	7	–	–	147	25±3	–	500	2600216
6.0 Makro	23	1.8	8.3	–	–	148	22±2	–	400	2600206
6.0 Makro	23	1.8	8.3	–	–	148	22±2	■	400 x 1	2655206
10.0	24	0.6	15	–	–	169	17±2	–	200	2600190
10.0	25	7.5	23	–	–	301	25±3	–	100	2600195

	Volume setting				
	1	2	3	4	5
 1	1	2	3	4	5µl
 2	10	20	30	40	50µl
 3	25	50	75	100	125µl
 4	50	100	150	200	250µl
 5	0.25	0.5	0.75	1.0	1.25ml
 6	0.5	1.0	1.5	2.0	2.5ml
 7	1	2	3	4	5ml
 8					

Dispenser Tips

For serial pipettings

The volume of the Dispenser Tips is automatically identified by the pipetting device (HandyStep® electronic only). PD-Dispenser Tips fit onto ratiolab® dispetta, Brand HandyStep® and HandyStep® S and Eppendorf Multipette® 4780. Not autoclavable.

8 Adapters for 25 ml and 50 ml Dispenser Tips must be ordered separately.

Volume ml	Fig. No.	Description	Quantity per Pack	Order No.
0.5	1	non-sterile	100	2900401
1.25	2	non-sterile	100	2900402
2.5	3	non-sterile	100	2900403
5.0	4	non-sterile	100	2900404
12.5	5	non-sterile	100	2900405
25	6	non-sterile	50	2900109
50	7	non-sterile	25	2900106
Adapter	8	non-sterile	10	2900107
0.5	1	sterile, individually packed	100	2910101
1.25	2	sterile, individually packed	100	2910102
2.5	3	sterile, individually packed	100	2910103
5.0	4	sterile, individually packed	100	2910104
12.5	5	sterile, individually packed	100	2910105
25	6	sterile, individually packed	25	2910109
50	7	sterile, individually packed	25	2910106
Adapter	8	sterile, individually packed	5	2910107

Labware



Think! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Cuvettes

Cuvettes

Disposable cuvettes have long replaced cuvettes once normally made of glass. New plastics coupled with modern methods of production allow photometric measurement well into the UV range.

Ultra-precision molds with several cavities – one per cuvet – are used for producing ratiolab® Q-VETTES and ratiolab® CUVETTES under controlled room conditions. Thus, several cuvettes are produced in a single injection molding run. In order to prevent deviations in extinc-

tion coefficient values from occurring in any one run due to increased stray light, the cuvettes are automatically sorted according to their numbered cavities of origin. Each package shows the corresponding local production number of the cuvettes position in the net. So all cuvettes inside one styrofoam box are technical wise identical. Any measurement done with those identical cuvettes insures a high accuracy.



Q-VETTES

The new generation of cuvettes with clearly improved photometric properties. The optimized form and the small wall thickness of the cuvettes provides increased heat transfer resulting in more constant sample temperatures during photometric measurements.

- crystal-clear polystyrene (PS)
- applicable wavelength range 340 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with closable lid

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® Q-VETTES semi-micro	PS	1.6	styrofoam racks 10 x 100	1000	2712120
ratiolab® Q-VETTES macro	PS	4.0	styrofoam racks 10 x 100	1000	2711110

Cuvettes



CUVETTES

For photometric measurements even in the UV range 220 nm

Due to the special plastic material and the excellent manufacturing process, the cuvettes can also be used in photometric ranges reserved for UV glass cuvettes in the past.

- applicable wavelength range 220 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® CUVETTES semi-micro	UV	1.6	styrofoam rack 1 x 100	100	2722120
ratiolab® CUVETTES macro	UV	4.0	styrofoam rack 1 x 100	100	2722110



Cuvettes of PMMA

- cuvettes of polymethylmethacrylate (PMMA)
- applicable wavelength range 300 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® semi-micro cuvettes	PMMA	1.6	styrofoam racks 10 x 100	1000	2810100
ratiolab® macro cuvettes	PMMA	4.0	styrofoam racks 10 x 100	1000	2811110

Cuvettes



Cuvettes, Solvent Resistant

- resistant against polar solvents
- applicable wavelength range 220 to 900 nm
- very low variation of extinction values
- excellent optical transmission range
- cavity-sorted production
- embossed area aside the measuring fields reduces the risks of damaging the cuvette by the cuvette holder
- path length 10 mm
- outer dimensions 12.5 x 12.5 x 45 mm
- supplied in practical styrofoam racks: 100 net identical cuvettes in a styrofoam box with a resealable cover

Product	Material	Volume ml	Packaging	Quantity per Pack	Order No.
ratiolab® semi-micro cuvettes	solvent resistant	1.6	styrofoam rack 1 x 100	100	2725120
ratiolab® macro cuvettes	solvent resistant	4.0	styrofoam rack 1 x 100	100	2725110



Stopper for Cuvettes

Polypropylene (PP).

- for all ratiolab® cuvettes
- solvent resistant

Product	Material	Color	Packaging	Quantity per Pack	Order No.
Stopper for cuvettes	PP	natural	bag 1 x 1000	1000	2812011

Multicell Cuvettes

Multicell Cuvettes of PMMA

ratiolab® 12-cavity multicell cuvettes – suitable for analysers Thermo Scientific: Arena 20, 20XT, 30 and 60.

Arena applications cover processes from food / beverage industry, biochemical and pharmaceutical tests.

Fields of analysing:

- food (milk, meat, honey)
- beverages (wine, beer, juice)
- customised applications



Product	Material	Packaging	Quantity per Pack	Order No.
12-cavity multicell cuvettes	PMMA	packs 40 x 25	1000	2812012

Analysis Beakers and Scintillation Vessels

Analysis Beakers

Clear polystyrene (PS).

- high-precision design for use with robotic analytical systems Technicon T1 / T2; Genseac G1 / Hitachi H1



Product	Fig. No.	Volume ml	Packaging	Quantity per Pack	Order No.
analysis beakers Technicon T1	1	2.0	1 x 1000	1000	5700110
analysis beakers Technicon T2	2	3.5	1 x 1000	1000	5700120
analysis beakers Genseac G1	3	0.5	1 x 1000	1000	5700200
analysis beakers Hitachi H1	4	3.0	1 x 1000	1000	5700401



Scintillation Vessels

Natural polyethylene (HD-PE).

- high-precision design for use with robotic analytical systems
- insert tubes with special leakproof cap
- convenient opening and closing

Product	Fig. No.	Volume ml	Ø x H mm	Packaging	Quantity per Pack	Order No.
scintillation bottles with cap	1	20	27 x 60	cardboard box 1 x 1000	1000	5810100
caps for scintillation bottles	–	–	–	bag 1 x 1000	1000	581010D
insert tubes with caps for scintillation bottles	2	4	14 x 53	cardboard box 2 x 1000	2000	5810110

Cell Counter Vials and Centrifuge Tubes



1



2

Cell Counter Vials

Cell counter vials made of clear polystyrene (PS).

- high-precision design for use with robotic analytical systems

Product	Fig. No.	Volume ml	Material	Packaging	Quantity per Pack	Order No.
for Coulter® and Hycel® cell counter systems						
Cell Counter Vial 1 with lid	1	25	PS	PS-tray 20 x 50	1000	5515010
Cell Counter Vial 1 with lid	1	25	PS	bags 4 x 250	1000	5515040
Cell Counter Vial 1 without lid	–	25	PS	bags 4 x 250	1000	5515041
lids for Cell Counter Vial 1	–	–	PE	bag 1 x 1000	1000	551504D
for cell counter systems with cylindrical containers, e.g. Al® and Linson®						
Cell Counter Vial 2 without lid	2	20	PS	bag 1 x 1000	1000	5515051



1



2



3

Centrifuge Tubes

Polypropylene (PP).

- conical bottom or self-standing
- available non-sterile or sterile
- the sterile centrifuge tubes are certified to be free from RNase, DNase, Endotoxin, Pyrogen and ATP
- printed graduations and frosted writing field
- with red Polyethylene (HD-PE) screw cap
- temperature withstand -80 °C to 121 °C
- centrifugable up to 11000g
- free from heavy metals

Volume ml	Fig. No.	Bottom	Sterilized	Ø x H mm	Packaging	Quantity per Pack	Order No.
15	1	conical	–	17 x 120	bags 30 x 25	750	3300005
15	1	conical	■	17 x 120	bags 30 x 25	750	3300006
50	2	conical	–	30 x 115	bags 12 x 25	300	3300001
50	2	conical	■	30 x 115	bags 12 x 25	300	3300002
50	3	self-standing	–	30 x 115	bags 10 x 25	250	3300003
50	3	self-standing	■	30 x 115	bags 10 x 25	250	3300004

Microcentrifuge Tubes

Microcentrifuge Tubes

Polypropylene (PP).

- autoclavable with opened cap at 121 °C, 20 minutes
- natural color or different colors for comfortable identification
- tight sealing cap
- safe and easy to be opened and closed
- 5615005 and 5615106: free of DNase, RNase, pyrogens, human DNA, PCR inhibitors



Volume ml	Fig. No.	Centrifugable g	Cap	Color	Quantity per Pack	Order No.
0.5	1	18.000	■	natural	1000	5615030
1.5	2	25.000	■	natural	1000	5615000
1.5	2	25.000	■	natural	1000	5615005
1.5	3	25.000	■	yellow	1000	5615001
1.5	4	25.000	■	green	1000	5615002
1.5	5	25.000	■	red	1000	5615003
1.5	6	25.000	■	blue	1000	5615004
1.5	7	25.000	–	natural	1000	5615020
2.0	8	25.000	■	natural	1000	5615101
2.0	8	25.000	■	natural	1000	5615106

Microcentrifuge Tubes

Safety-Cap Microcentrifuge Tubes

Polypropylene (PP).

The new cap sealing of test tubes ensures an extreme tightness, which is essential for applications with valuable samples, radioactive materials and DNA.

- autoclavable with opened cap at 121 °C, 20 minutes
- certified free of RNase, DNase, human DNA, PCR inhibitors, pyrogens, ATP and completely metal-free
- produced in microbiologically controlled clean room ISO 8

free of RNase, DNase, human DNA, PCR inhibitors, ATP, pyrogens and metal

- optimal tightness due to tight serration at the cap and tight channel at the tube; thereby a low evaporation is guaranteed
- secured shut due to form-closed cap lock; accidental opening of the lid during incubation is not possible
- high chemical resistance
- labeling areas on the cap and tube
- graduated for easy determination of the volume
- temperature of use: -80 °C to +121 °C



The additional safety lock prevents uncontrolled opening of the tubes.



Volume ml	Fig. No.	Centrifugable g	Sterilized	Packaging	Quantity per Pack	Order No.
0,5	1	30000	–	2 x 500	1000	5615038
0,5	1	30000	■	50 x 1	50	5615039
1,5	2	30000	–	1 x 1000	1000	5615008
1,5	2	30000	■	100 x 1	100	5615009
2,0	3	30000	–	2 x 500	1000	5615108
2,0	3	30000	■	100 x 1	100	5615109
5,0	4	21000	–	1 x 100	100	5615158
5,0	4	21000	■	50 x 1	50	5615159

free of RNase, DNase, pyrogens and PCR-Inhibitors

Microcentrifuge tubes with screw cap and O-Ring Seal

Polypropylene (PP).

- with conical bottom or additional self-standing
- sterilized
- centrifugable up to approx. 25000g
- temperature-resistant from -80 °C to +121 °C
- autoclavable up to +121 °C
- Ø x H: 13.1 x 48 mm
- resealable bags

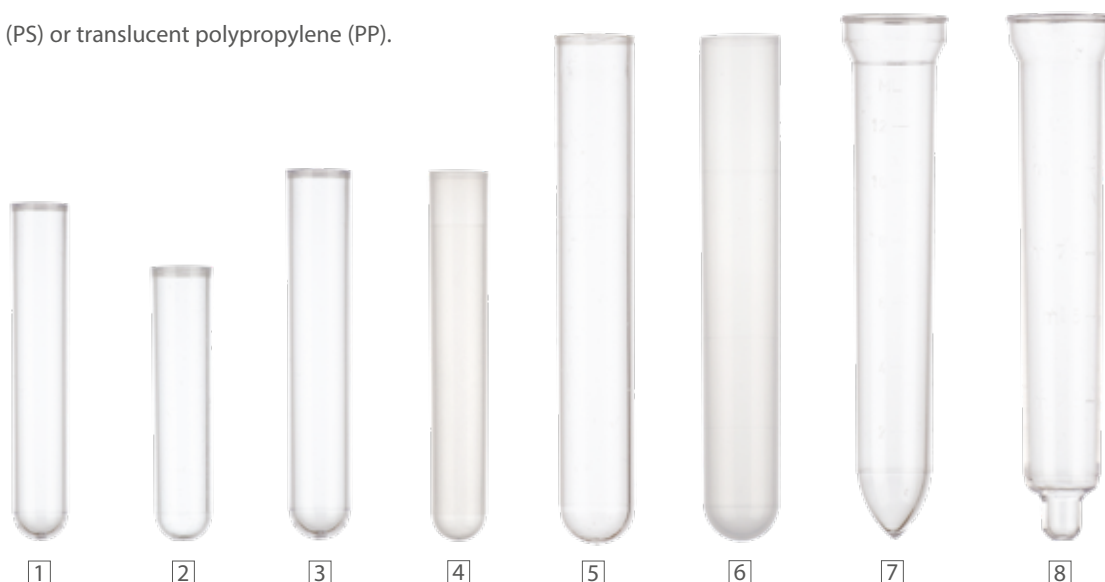


Volume ml	Fig. No.	Bottom	Labeling Area	Sterilized	Packaging	Quantity per Pack	Order No.
0.5	1	self-standing	–	■	2 x 500	1000	5616021
0.5	2	conical	–	■	2 x 500	1000	5616023
1.5	3	self-standing	■	■	2 x 500	1000	5616022
1.5	4	conical	■	■	2 x 500	1000	5616027
2.0	5	self-standing	■	■	2 x 500	1000	5616026
2.0	6	conical	■	■	2 x 500	1000	5616025

Test Tubes and Stoppers

Test Tubes

Clear polystyrene (PS) or translucent polypropylene (PP).



Product	Fig. No.	Ø x H mm	Material	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
RIA tubes	1	11 x 70	PS	4	round	bags 4 x 250	1000	3514040
coagulometer tubes	2	12 x 55	PS	4	round	bag 1 x 1000	1000	3014030
test tubes	3	12 x 75	PS	5	round	bag 1 x 1000	1000	3514030
test tubes	4	12 x 75	PP	5	round	bag 1 x 1000	1000	3514031
test tubes	3	13 x 75	PS	5.1	round	bag 1 x 1000	1000	3514032
test tubes	4	13 x 75	PP	5.1	round	bag 1 x 1000	1000	3514033
test tubes	5	16 x 100	PS	12	round	bag 1 x 1000	1000	3714010
test tubes	6	16 x 100	PP	12	round	bag 1 x 1000	1000	3814010
test tubes	7	18 x 105	PS	12	conical	bag 1 x 1500	1500	3520000
test tubes	8	18 x 105	PS	12	round	bag 1 x 1500	1500	3622000

Stoppers for test tubes, Ø 11 – 13 mm

Polyethylene (PE).

- very tight seal due to 2 sealing rings
- available in natural and 4 more colors
- fit to test tube: figure 1-4



Color	Packaging	Quantity per Pack	Order No.
natural	bag 1 x 1000	1000	3514900
blue	bag 1 x 1000	1000	351490B
green	bag 1 x 1000	1000	351490G
red	bag 1 x 1000	1000	351490R
yellow	bag 1 x 1000	1000	351490Y

Stoppers for test tubes, Ø 16 – 17 mm

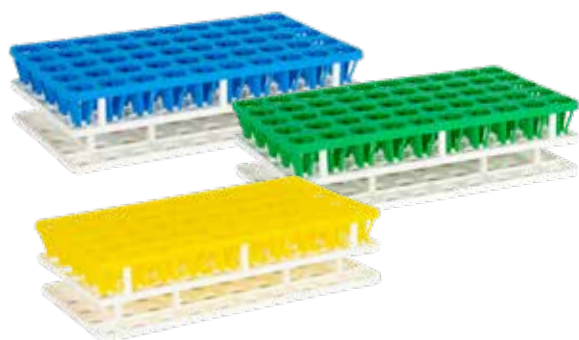
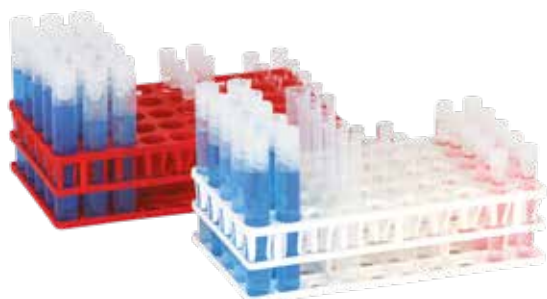
Polyethylene (PE).

- very tight seal due to 2 sealing rings
- available in natural and 4 more colors
- fit to test tube: figure 5-6



Color	Packaging	Quantity per Pack	Order No.
natural	bag 1 x 1000	1000	3914900
blue	bag 1 x 1000	1000	391490B
green	bag 1 x 1000	1000	391490G
red	bag 1 x 1000	1000	391490R
yellow	bag 1 x 1000	1000	391490Y

Multistand Plus Rack and Rack for Microcentrifuge Tubes



Multistand Plus Rack for sample tubes

Polypropylene (PP).

The multistand plus is suitable for sample tubes and you have the opportunity to store and place 50 tubes. The multistand plus has a temperature resistance up to 75 °C.

- for tubes Ø 12 to Ø 18 mm
- autoclavable
- 200 mm x 115 mm x 50 mm (LxWxH)

Color	Positions	Quantity per Pack	Order No.
red	5 x 10	1	3712301
white	5 x 10	1	3712302
white - blue	5 x 10	1	3712303
white - yellow	5 x 10	1	3712304
white - green	5 x 10	1	3712305
white - purple	5 x 10	1	3712306
white - rot	5 x 10	1	3712307

New
New
New
New
New



Rack for Microcentrifuge Tubes

Polypropylene (PP).

Ideal for the secure handling of reaction vessels. Space-saving on the laboratory bench due to its narrow form. Practical side grips.

- for tubes up to Ø 11 mm
- autoclavable at 121 °C
- temperature-resistant from – 80 °C to +121 °C
- 225 mm x 65 mm x 28 mm (LxWxH)

Color	For Micro Tubes	Positions	Quantity per Pack	Order No.
green	1.5 – 2.0 ml	5 x 16	5	3712006
pink	1.5 – 2.0 ml	5 x 16	5	3712008
blue	1.5 – 2.0 ml	5 x 16	5	3712005
orange	1.5 – 2.0 ml	5 x 16	5	3712007
yellow	1.5 – 2.0 ml	5 x 16	5	3712009
mix pack	1,5 – 2,0 ml	5 x 16	5	3712010

Waste Disposal Bags, Waste Disposal Bags BIOHAZARD, Autoclavable at 121 °C

Custom sizes on request,
Autoclavable at 121 °C



Waste Disposal Bags, Dispenser Box, High Transparency

Polypropylene (PP).

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- for bag size 200 x 300 mm: practical bench-top stand, plastic-coated, with 3 rubber feet
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
200 x 300	2.5	50 µm	dispenser 1 x 100	100	7001005
bench-top stand for waste disposal bags 200 x 300 mm, Height 25 cm				1	7001400
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 200 x 300 mm				1	7001405



Waste Disposal Bags, High Transparency

Polypropylene (PP).

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 500	500	7001105
400 x 780	22	50 µm	cardboard box 1 x 500	500	7001155
600 x 800	47	50 µm	cardboard box 1 x 500	500	7001205
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7001305



Waste Disposal Bags BIOHAZARD red – Warning Instruction and sterilization indicator patch

Polyethylene (PE).

Distinctive red autoclavable bags for easy identification, for the disposal of contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in English, German, French and Spanish languages
- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- practical bench-top stand, plastic-coated, with 3 rubber feet
- only in large bag autoclaving

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
210 x 290	2.5	20 µm	cardboard box 10 x 100	1000	7002110
Set consisting of bench-top stand and 100 red waste disposal bags 210 x 290 mm				1	7001410

Waste Disposal Bags BIOHAZARD, Autoclavable at 121 °C

Custom sizes on request,
Autoclavable at 121 °C



Waste Disposal Bags BIOHAZARD yellow – Warning Instruction and sterilization indicator patch

Polyethylene (HD-PE).

Autoclavable disposable waste bag of very strong PE-film for the sterilization and disposal of hazardous and contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in German, English and French language
- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 500	500	7003100
400 x 780	22	50 µm	cardboard box 1 x 500	500	7003110
600 x 800	47	50 µm	cardboard box 1 x 500	500	7003120
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7003130



Waste Disposal Bags, high transparency, BIOHAZARD

Polypropylene (PP).

For the sterilization and disposal of hazardous and contaminated labware.

- with blue BIOHAZARD symbol
- with white labeling field
- autoclavable at 121 °C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 650	10	40 µm	cardboard box 4 x 50	200	7002111
415 x 580	16	40 µm	cardboard box 4 x 50	200	7002112
640 x 800	52	40 µm	cardboard box 4 x 50	200	7002113

Waste Disposal Bags, Waste Disposal Bags BIOHAZARD, Autoclavable at 134 °C

Custom sizes on request,
Autoclavable at 134 °C



Waste Disposal Bags, Dispenser Box, Standard

Polypropylene (PP).

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 134 °C, 20 min, for autoclaving, the bag must not be completely closed
- for bag size 200 x 300 mm: practical bench-top stand, plastic-coated, with 3 rubber feet
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
200 x 300	2.5	50 µm	dispenser 1 x 100	100	7001000
bench-top stand for waste disposal bags 200 x 300 mm, Height 25 cm				1	7001400
Set consisting of bench-top stand and 100 waste disposal bags (standard) 200 x 300 mm				1	7001401

Waste Disposal Bags, Standard

Polypropylene (PP).

Bags of very strong PP-film with a broad seam at the bottom, for the disposal of contaminated labware.

- autoclavable at 134 °C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 500	500	7001100
400 x 780	22	50 µm	cardboard box 1 x 500	500	7001150
600 x 800	47	50 µm	cardboard box 1 x 500	500	7001200
600 x 800	47	50 µm	cardboard box 1 x 100	100	7001210
600 x 800	47	100 µm	cardboard box 1 x 125	125	7001212
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7001300
700 x 1100	91	50 µm	cardboard box 1 x 75	75	7001310
700 x 1100	91	100 µm	cardboard box 1 x 75	75	7001311

Waste Disposal bags BIOHAZARD – Warning Instruction and sterilization indicator patch

Polypropylene (PP).

Autoclavable disposable waste bag of very strong PP-film for the sterilization and disposal of hazardous and contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in English, German, French and Spanish language
- autoclavable at 134 °C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 100	100	7002105
300 x 500	8	50 µm	cardboard box 1 x 500	500	7002100
400 x 780	22	50 µm	cardboard box 1 x 100	100	7002155
400 x 780	22	50 µm	cardboard box 1 x 500	500	7002150
600 x 800	47	50 µm	cardboard box 1 x 100	100	7002205
600 x 800	47	50 µm	cardboard box 1 x 500	500	7002200
700 x 1100	91	50 µm	cardboard box 1 x 75	75	7002305
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7002300



Waste Disposal Bags BIOHAZARD, Autoclavable at 134°C

Custom sizes on request,
Autoclavable at 134°C



Waste Disposal Bags BIOHAZARD red – Warning Instruction and sterilization indicator patch

Polypropylene (PP).

Distinctive red autoclavable bags for easy identification, for the disposal of contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in German, English and French language
- autoclavable at 134°C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 500	500	7003200
400 x 780	22	50 µm	cardboard box 1 x 500	500	7003210
600 x 800	47	50 µm	cardboard box 1 x 500	500	7003220
600 x 800	47	50 µm	cardboard box 1 x 100	100	7003225
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7003230
700 x 1100	91	50 µm	cardboard box 1 x 75	75	7003235

Waste Disposal Bags BIOHAZARD yellow – Warning Instruction and sterilization indicator patch

Polypropylene (PP).

Autoclavable disposable waste bag of very strong PP-film for the sterilization and disposal of hazardous and contaminated labware.

- rectangle white indicator patch field turns into dark when autoclaved
- with BIOHAZARD symbol and safety imprint in German, English and French language
- autoclavable at 134°C, 20 min, for autoclaving, the bag must not be completely closed
- tested according to ASTM D1238, ASTM D638 and ASTM D1709 (Dart-Drop-Test)

W x H mm	Volume approx. l	Film Thickness	Packaging	Quantity per Pack	Order No.
300 x 500	8	50 µm	cardboard box 1 x 500	500	7003300
400 x 780	22	50 µm	cardboard box 1 x 500	500	7003310
600 x 800	47	50 µm	cardboard box 1 x 500	500	7003320
600 x 800	47	50 µm	cardboard box 1 x 100	100	7003325
700 x 1100	91	50 µm	cardboard box 1 x 350	350	7003330
700 x 1100	91	50 µm	cardboard box 1 x 75	75	7003335



Bench-top Stand, Transport bag BIOHAZARD and Cleanibag System

Bench-top stand for waste disposal bags

Practical bench-top stand, plastic-coated, with 3 rubber feet.

- for bag size 200 x 300 mm and 300 x 500 mm



Product	Bild-Nr.	Quantity per Pack	Order No.
Bench-top stand for waste disposal bags 200 x 300 mm, Height 25 cm	2	1	7001400
Set consisting of bench-top stand and 100 waste disposal bags (standard) 200 x 300 mm	3	1	7001401
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 200 x 300 mm	3	1	7001405
Bench-top stand for waste disposal bags 300 x 500 mm, Height 35 cm	1	1	7001430
Set consisting of bench-top stand and 100 waste disposal bags (standard) 300 x 500 mm	3	1	7001415
Set consisting of bench-top stand and 100 waste disposal bags (high transparency) 300 x 500 mm	3	1	7001420
Set consisting of bench-top stand and 100 red waste disposal bags 210 x 290 mm	4	1	7001410
Bench top stand with tilt base, for waste disposal bags 200 x 300 mm	5	1	7001440
Design table stand made of stainless steel autoclavable, for waste disposal bags 200 x 300 mm	6	1	7001450

Transport bags BIOHAZARD

Polyethylene (LD-PE).

- transparent with fast-zip closure for reclosing and with a separate external pouch for documentation
- suitable for sample transport



W x H mm	Film Thickness	Packaging	Quantity per Pack	Order No.
155 x 250 / 210	50 µm	cardboard box 1 x 100	100	7000300
230 x 305 / 250	50 µm	cardboard box 1 x 100	100	7000310

Cleanibag System

All-purpose PE bags with self-adhesive strip for clinical and laboratory use.

- self-adhesive strip, sticks on smooth and clean surfaces
- residue-free on removable

Other sizes available on request.

Self-adhesive



W x H mm	Volume approx. l	Packaging	Quantity per Pack	Order No.
200 x 300	2.5	cardboard box 1 x 1000	1000	7000250
300 x 300	4.5	cardboard box 1 x 1000	1000	7000260
300 x 450	8	cardboard box 1 x 1000	1000	7000270

Petri Dishes and Inoculating Loops



Petri Dishes

Transparent polystyrene (PS).

- uncoated, with vents
- sterilized or clean as produced

Ø*x H mm	Description	Packaging	Quantity per Pack	Order No.
60 x 14	with vents	25 x 20	500	9050006
60 x 14	sterilized, with vents	25 x 20	500	9050106
90 x 15	with vents	25 x 20	500	9050000
90 x 15	sterilized, with vents	25 x 20	500	9050100
147 x 18	with vents	11 x 20	220	9050004
147 x 18	sterilized, with vents	11 x 20	220	9050104
65 x 14	with triple vents with compartments	25 x 20	500	9050005
65 x 14	sterilized, with triple vents with compartments	25 x 20	500	9050105

*external diameter



Petri Dishes

Transparent polystyrene (PS).

The ventilated plates have 8 vents, 4 of which are functional for the passage of air and 4 additional to guarantee maximum stability of the lid.

Improvements have been adopted to guarantee maximum stability of the dishes once stacked, these include:

- increased plastic thickness for greater resistance to deformation under thermal and mechanical stress
- 4 vents that help center the plate and lid
- oversized rings on the edge of the lid and on the bottom of the plate to further improve its stability
- sterilized or clean as produced

Ø x H mm	Description	Packaging	Quantity per Pack	Order No.
90 x 14	with vents	25 x 24	600	9050003
90 x 14	sterilized, with vents	25 x 24	600	9050103

New
New



Inoculating Loops

Made of polystyrene (PS).

- hexagonal handle for safe handling
- beta-sterile
- sterile, individually packed in easy to open peel-packs

Product	Packaging	Quantity per Pack	Order No.
1 µl inoculating loops	100 peel-packs of 20	2000	7020100
10 µl inoculating loops	100 peel-packs of 20	2000	7020200

Multi Purpose Beakers and Multi Purpose Bottles

Multi Purpose beakers with screw-caps

Polypropylene (PP).

For sampling, transport and storage of solid, pasty and liquid samples.

- with red screw-cap
- supplied in non-sterile or sterile, individually packed



Volume ml	Fig. No.	Material	Graduation and Labeling area	Sterilized	Height with cap, mm	Ø cap, outer, mm	Packaging	Quantity per Pack	Order No.
30	1	PP	–	–	47	43	cardboard box 1 x 1000	1000	5921173
30	1	PP	–	■	47	43	bags 500 x 1	500	5921174
30	2	PP	■	–	82	34	cardboard box 1 x 700	700	5921177
30	2	PP	■	■	82	34	bags 500 x 1	500	5921178
60	3	PP	■	–	66	43	cardboard box 1 x 600	600	5921175
60	3	PP	■	■	66	43	bags 500 x 1	500	5921176
120	4	PP	■	–	73	63	cardboard box 1 x 500	500	5921182
120	4	PP	■	■	73	63	bags 250 x 1	250	5921183
200	5	PP	–	–	80	64	cardboard box 1 x 200	200	5921185
200	5	PP	–	■	80	64	bags 150 x 1	150	5921184
200	6	PS	–	■	82	64	bags 150 x 1	150	5921188



Multi Purpose bottles

Polyethylene, blue translucent (PE).

- inclusive lid with nonwoven fabric liner
- with graduations, light protection
- wide neck diameter 80 mm
- volume: 2.5 l

Product	Packaging	Quantity per Pack	Order No.
Multi purpose bottle 2.5 l with self-adhesive labels	cardboard box 1 x 60	60	5922250

Ear Tips and Ear Funnels



Ear Tips, Ear Funnels



Hygienic and safe disposable products. Once attached, they remain fixed on most commonly used otoscopes. Ergonomic and smoothly formed. No sharp edges.

Ear Tips

Made of high-quality polystyrene (PS).

- for Heine K180*, Mini 3000*, Beta 200*, KaWe Piccolight C*, Riester ri-mini* otoscopes
- high precision
- the hygienic disposable alternative

Ø mm	Color	Packaging	Quantity per Pack	Order No.
2.5	black	bags 20 x 50	1000	1020340
2.5	black	bags 2 x 500	1000	1020350
2.5	black	bag 1 x 1000	1000	1020330
2.5	grey	bags 20 x 50	1000	1020250
2.5	grey	bags 2 x 500	1000	1020260
2.5	grey	bag 1 x 1000	1000	1020230
4.0	black	bags 20 x 50	1000	1020341
4.0	black	bags 2 x 500	1000	1020351
4.0	black	bag 1 x 1000	1000	1020331
4.0	grey	bags 20 x 50	1000	1020251
4.0	grey	bags 2 x 500	1000	1020261
4.0	grey	bag 1 x 1000	1000	1020231

Ear Funnels

Made of high-quality polystyrene (PS).

- for Heine Beta 100* otoscopes
- high precision
- the hygienic disposable alternative

Ø mm	Color	Packaging	Quantity per Pack	Order No.
2.5	black	bag 1 x 1000	1000	1020240
2.5	black	bags 2 x 500	1000	1020243
2.5	black	bags 20 x 50	1000	1020540
4.0	black	bag 1 x 1000	1000	1020241
4.0	black	bags 2 x 500	1000	1020242
4.0	black	bags 20 x 50	1000	1020541

* registered trade mark

Life Science



Think! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Micro Test Plates

96-Well Micro Test Plates, volume approx. 300 µl

Clear polystyrene (PS) or translucent polypropylene (PP).

- with U-, F-, or V-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumerically coded
- wells with raised rims for reduced cross-contamination and effective sealing with ratiolab® cover films (see on pages 76-77)

Individual Plates upon request

- precise design, perfectly shaped for use with automatic systems
- optimum space for precise positioning
- space-saving and stackable
- polypropylene plates may be sealed with heat-sealing films without deformation



1



2



3



Volume approx. 300 µl

Bottom	Fig. No.	Material	Sterilized	Packaging	Quantity per Pack	Order No.
U	1	PS	–	bags 10 x 10	100	6018111
U	1	PS	■	individually in bags 100 x 1	100	6018113
U	2	PP	–	bags 10 x 10	100	6018121
U	2	PP	■	individually in bags 100 x 1	100	6018123
F	1	PS	–	bags 10 x 10	100	6018211
F	1	PS	■	individually in bags 100 x 1	100	6018213
F	2	PP	–	bags 10 x 10	100	6018221
F	2	PP	■	individually in bags 100 x 1	100	6018223
V	1	PS	–	bags 10 x 10	100	6018311
V	1	PS	■	individually in bags 100 x 1	100	6018313
V	2	PP	–	bags 10 x 10	100	6018321
V	2	PP	■	individually in bags 100 x 1	100	6018323

Volume approx. 400 µl

Bottom	Fig. No.	Material	Sterilized	Color	Packaging	Quantity per Pack	Order No.
U	3	PP	–	white	bags 10 x 10	100	6018810
U	2	PP	–	transparent	bags 10 x 10	100	6018812
U	2	PP	■	transparent	individually in bags 100 x 1	100	6018813
U	3	PS	–	white	bags 10 x 10	100	6018820
U	1	PS	–	transparent	bags 10 x 10	100	6018822
U	1	PS	■	transparent	individually in bags 100 x 1	100	6018823

Micro Test Plates, Spot Test Plates



96-Well Micro Test Plates, volume approx. 300 µl

Polypropylene (PP) or polystyrene (PS).

Micro test plates for luminescence, fluorescence and absorption applications.

- with U-bottom or F-bottom
- SBS standard micro test plate format
- 8 x 12 wells alphanumerically coded
- wells with raised rims for reduced cross-contamination and effective sealing with ratiolab® cover films (see on pages 76-77)
- precise design, perfectly shaped for use with automatic systems
- optimum space for bar code labels on the side walls
- space-saving and stackable
- surface untreated

Bottom	Material	Color	Packaging	Quantity per Pack	Order No.
U	PP	black	bags 10 x 10	100	6018710
U	PS	black	bags 10 x 10	100	6018711
U	PP	white	bags 10 x 10	100	6018712
U	PS	white	bags 10 x 10	100	6018713
F	PP	black	bags 10 x 10	100	6018717
F	PS	black	bags 10 x 10	100	6018718
F	PP	white	bags 10 x 10	100	6018719
F	PS	white	bags 10 x 10	100	6018720

Lids for Micro Test Plates

Optional in highly transparent polystyrene (PS) or polypropylene (PP).

Material	Sterilized	Packaging	Quantity per Pack	Order No.
PS	–	bags 10 x 10	100	6018402
PS	■	individually in bags 100 x 1	100	6018401
PP	–	bags 10 x 10	100	6018422
PP	■	individually in bags 100 x 1	100	6018421

Spot Test Plates

Polystyrene (PS), white.

- 3 x 4 wells
- L x W x H: 135 x 109 x 10 mm

Ø Mould mm	Packaging	Quantity per Pack	Order No.
20	bag 1 x 100	100	6018060

Low-Profile Deep-Well-Plate

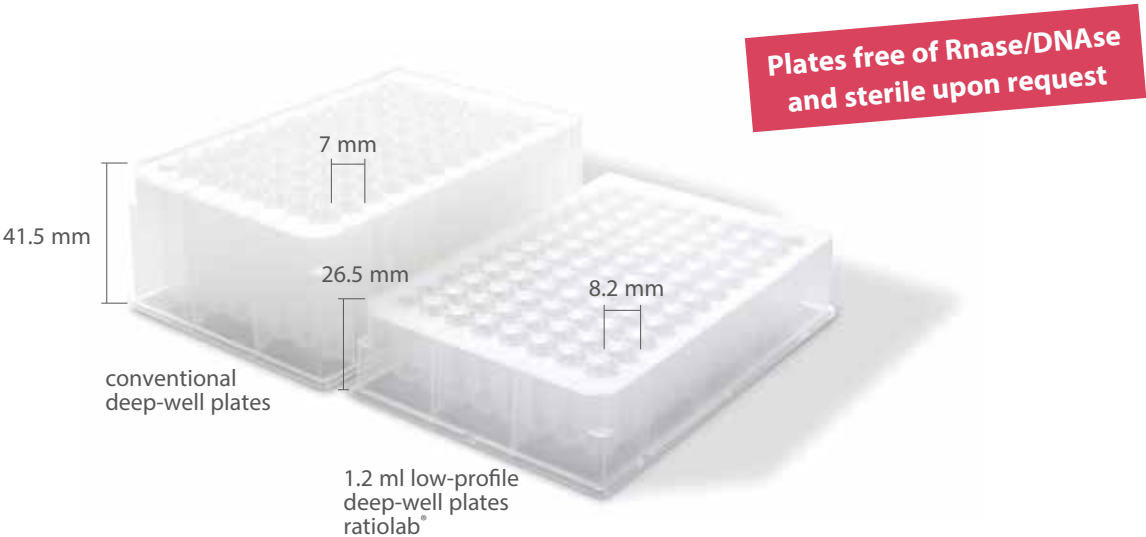
Low-Profile Deep-Well Plate (96)

Clear polypropylene (PP).

These 1.2 ml low-profile deep-well plates are ideal for pharmaceuticals, biotechnology and diagnostics. Of the same standard dimensions (Society for Biomolecular Sciences – SBS), they are one-third lower than standard deep well plates (96). They thus require less space! Requiring some 30% less space, they help to optimize warehouse space, hence lowering costs – especially for costly cryo-storage applications.

The cavities are some 20% larger than conventional plates. Thus, when used with robots, they provide additional security. The chimney form of the wells reliably prevents cross-contamination. Their precise, true-to-size form makes them highly suitable for High-Throughput-Screening (HTS).

- about half as high as conventional deep-well plates at 1.2 ml fill volume
- SBS standard micro test plate form
- well with significantly larger cross section
- wells with raised rims for reduced cross-contamination
- improved visual control due to clear polypropylene
- autoclavable at 121 °C, 20 minutes
- temperature resistant to – 80 °C
- 8 x 12 wells with alphanumeric code in micro test plate format
- optimally sealing with ratiolab® cover films (see on pages 76-77)
- precise design, for use in automatic pipetting systems for High-Throughput-Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable



Volume per Well ml	Well	Bottom	Packaging	Quantity per Pack	Order No.
1,2 Low-Profile	96	U	bags 10 x 5	50	8101012

Deep-Well-Plates

Deep-Well Plates

Translucent polypropylene (PP), surface with very low protein binding.

The chimney form of the wells reliably prevents cross-contamination. Their precise, true-to size form makes them highly suitable for High-Throughput-Screening (HTS).

- SBS standard micro test plate format
- well with significantly larger cross section
- wells with raised rims for reduced cross-contamination

- autoclavable at 121 °C, 20 minutes
- temperature resistant to – 80 °C
- alphanumeric well coding
- optimally sealing with ratiolab® cover films (see on pages 76-77)
- precise design, for use in automatic pipetting systems for High-Throughput-Screening (HTS)
- optimum space for bar code labels on the side walls
- space-saving and stackable



1



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4

Volume per Well ml	Fig No.	Well	Bottom	Packaging	Quantity per Pack	Order No.
0.3	1	384	V	bags 8 x 6	48	6020320
1.0	2	96	U	bags 10 x 9	90	6020110
1.2	3	96	U	bags 1 x 32	32	6020121
2.2	4	96	V	bags 10 x 5	50	6020221

New
New

Closures for Deep-Well-Plates



1



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4

Closures for 96-Well Deep-Well-Plates Low-Profile, 1.2 ml

Made of thermo-plastic elastomer (TPE).

- suitable for 8101012
- autoclavable at 121 °C, 20 minutes

Product	Fig. No.	Material	Packaging	Quantity per Pack	Order No.
96-well-cover mats	1	TPE	cardboard box 10 x 10	100	8101101

Closures for 96-Well Deep-Well-Plates

Made of thermo-plastic elastomer (TPE) or ethylene vinyl acetate (EVA).

- closures 8200008 and 8200009 suitable for deep-well-plate 6020121
- closures 8200010 suitable for deep-well-plate 6020221

Product	Fig. No.	Material	Packaging	Quantity per Pack	Order No.
1.2 ml 8-well-cover strips	2	TPE	bag 1 x 1000	1000	8200008
1.2 ml 96-well-cover mats	3	TPE	bags 10 x 10	100	8200009
2.2 ml 96-well-cover mats*	4	EVA	bags 5 x 20	100	8200010

*for 96-square well plates

PCR Tubes



PCR Tubes

Pure polypropylene (PP).

- rapid and homogeneous heat transfer due to consistently ultrathin wall design
- perfect fit, compatible with all major brands of thermocyclers due to precise production
- free of DNase, RNase and DNA
- variety of tight closures available to reduce sample evaporation
- suitable for Real-Time-PCR

PCR Tubes, single

- volume 0.2 or 0.5 ml
- with attached domed or flat cap
- caps designed for tight sealing, easy open and close

Volume ml	Fig. No.	Cap	Packaging	Quantity per Pack	Order No.
0.2	1	flat	1 x 1000	1000	8610006
0.2	2	domed	1 x 1000	1000	8610001
0.5	3	flat	1 x 1000	1000	8610007

PCR Strips of 8 Tubes

- volume 0.2 ml
- with attached domed or flat cap, for use with detached 8-cap strips
- caps designed for tight sealing, easy opening and close

Volume ml	Fig. No.	Caps	Packaging	Quantity per Pack	Order No.
with attached individual caps					
8 x 0.2	4	flat	7 x 18	126	8610040
8 x 0.2	5	domed	1 x 120	120	8610039
for separate cap strips					
8 x 0.2	6	without	1 x 250	250	8610002
cap strips					
8-cap-strips	7	flat	1 x 126	126	8610015
8-cap-strips	8	domed	1 x 126	126	8610003

PCR Plates

PCR Plates

The plates conform to the highest requirements of PCR (Polymerase Chain Reaction). They are made of polypropylene and are characterized by their very thin but uniform walls. In this way, optimal heat transfer in short cycle times is achieved. The smooth inside walls of the cavities minimize the binding of enzymes and nucleic acids.

The plates are free of DNA, DNase and RNase. They are available opti-

onally without or with edges (the latter to minimize cross-contamination).

- working volumes of 0.1 ml, 0.2 ml and 0.04 ml
- alphanumeric coding for optimal sample identification
- available in eight versions for various PCR systems
- suitable for Real-Time-PCR
- the PCR plate 8610014 is up to 4000g centrifugable



Volume ml	Fig. No.	Description	Packaging	Quantity per Pack	Order No.
96 x 0.2	1	with rim, High Profile	bags 5 x 10	50	8610011
96 x 0.2	2	semi-skirted, Straight Side	bags 5 x 10	50	8610012
96 x 0.1	3	semi-skirted, FAST Type Low Profile	bags 5 x 10	50	8610013
96 x 0.2	4	without rim, Low Profile	bags 5 x 10	50	8610014
96 x 0.2	5	semi-skirted, ABI-Type Raised Rim	bags 5 x 10	50	8610016
96 x 0.1	6	semi-skirted, Light Cycler Type Low Profile	bags 5 x 10	50	8610017
384 x 0.04	7	fully skirted	bags 5 x 10	50	8610020
384 x 0.04	8	fully skirted	bags 5 x 10	50	8610021

New
New

PCR Racks



96-Well PCR-Rack

Polypropylene (PP).

Work and storage rack for 0.2 ml PCR tubes, PCR strips, and PCR segments.

- 8 x 12 positions, micro test plate format
- autoclavable
- available in five colors for the convenient identification of different types of samples
- transparent lids available in two different heights

Product	Material	Quantity per Pack	Order No.
PCR-Rack white	PP	10	6114100
PCR-Rack yellow	PP	10	6114101
PCR-Rack green	PP	10	6114103
PCR-Rack red	PP	10	6114104
PCR-Rack blue	PP	10	6114102
PCR-Rack mix pack of 2x5 color	PP	10	6114105
lid for PCR-Racks, 14 mm high	PP	10	6114110
lid for PCR-Racks, 28 mm high	SAN*	10	6114111

*Styrol-Acrylnitril

Floating Cryo Racks

Ideal for the thawing out or cooling of samples in PCR tubes and PCR strips. The loaded racks remain floating.

The tubes fit firmly in the racks and keep them well positioned in the bath.



Product	W x D mm	Quantity per Pack	Order No.
Floating Cryo Racks for 10 PCR tubes	Ø 70	10	6114200
Floating Cryo Racks for 4 PCR strips of 8 tubes	80 x 80	10	6114201

Micro-Tube System

Micro-Tube System

Highly practical system for processing small volumes. The reusable Micro-Rack is the work station and takes 96 micro-tubes in the standard 8 x 12 SBS microplate format. It is a stable and robust system and has a dust-tight lid. A sloping edge helps the positioning of the refill unit. The side edges can be labeled with a barcode. The rack is excellently suited to use in automatic dosing and robotic systems.

The 0.65 and 1.2 ml micro-tubes can be supplied as single, strips of 8 or in 96-well format as a refill system for 8 x 12 plates.

The tubes are closable either with an 8-lid strip or an 8 x 12 closure mat.

- the Micro-Tubes are autoclavable at 121 °C for 20 minutes
- temperature-resistant to – 80 °C



The refill system ensures easy, rapid and hygienic refilling of the Micro-Racks.

Lid

Plate

with tubes

The tubes can be removed singly and are numbered on the bottom.



Micro-Rack

Micro-Tubes 1.2 ml



Micro-Tube System



Micro-Tubes

Translucent polypropylene (PP) with very low protein binding.

- available as individual Micro-Tubes or Micro-Tube-Strips of 8 tubes for use with Micro-Racks
- volume 0.65 or 1.2 ml with round bottom

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratilab® Micro-Tubes, individual	0.65	round	bags 5 x 1000	5000	8200021
ratilab® Micro-Tubes, individual	1.2	round	bags 5 x 1000	5000	8200001
ratilab® Micro-Tube-Strips of 8 tubes	0.65	round	bags 5 x 120	600	8200022
ratilab® Micro-Tube-Strips of 8 tubes	1.2	round	bags 5 x 120	600	8200002



Micro-Racks, loaded or empty

Micro-Racks, tray and lid of translucent polypropylene (PP).

- available as empty racks or equipped with coded or non-coded Micro-Tubes
- pressure-tested tightness of the Micro-Tubes
- stackable, for the use with stacker instruments

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
ratilab® Micro-Racks, loaded, non-coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	8200023
ratilab® Micro-Racks, loaded, coded	0.65	round	50 Micro-Racks of 96 Micro-Tubes	50	8200024
ratilab® Micro-Racks, empty	0.65	–	50 Micro-Racks for 96 Micro-Tubes	50	8200027
ratilab® Micro-Racks, loaded, non-coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	8200003
ratilab® Micro-Racks, loaded, coded	1.2	round	50 Micro-Racks of 96 Micro-Tubes	50	8200004
ratilab® Micro-Racks, empty	1.2	–	50 Micro-Racks for 96 Micro-Tubes	50	8200007



Micro-Tube Refill-System for Micro-Racks

The Micro-Tubes are placed on an 8 x 12 tray and packed in an environmentally friendly cardboard box. The loaded tray can easily be moved from the cardboard box into the empty Micro-Rack.

- available with coded or non-coded Micro-Tubes
- for the very efficient, hygienic, and fast loading of Micro-Racks
- convenient handling and reduced waste
- pressure-tested tightness of the Micro-Tubes

Product	Volume ml	Bottom	Packaging	Quantity per Pack	Order No.
Micro-Tube Refill-System for Micro-Racks					
ratilab® Refill with 96 Micro-Tubes, non-coded	0.65	round	50 Refills of 96 Micro-Tubes	50	8200025
ratilab® Refill with 96 Micro-Tubes, coded	0.65	round	50 Refills of 96 Micro-Tubes	50	8200026
ratilab® Refill with 96 Micro-Tubes, non-coded	1.2	round	50 Refills of 96 Micro-Tubes	50	8200005
ratilab® Refill with 96 Micro-Tubes, coded	1.2	round	50 Refills of 96 Micro-Tubes	50	8200006
Closures for ratilab® Micro-Tubes					
8-cap-Strips			bag 1 x 1000	1000	8200008
8 x 12 cover mats			bag 10 x 10	100	8200009

Further cover films: see pages 76-77.

Cover Films

For micro test plates, deep-well plates, micro test tubes and PCR plates

Adhesive base must be free of grease, dust, degassing and air-conditioned in order to ensure safe bonding.

- self-adhesive
- for manual operation
- adhesive with high solvent resistance
- all films of SBS standard format

Soft-PVC peeling cover film

- self-adhesive with one or two tabs
- low-cost film for polystyrene plates
- can be removed without any residues
- minimum application temperature: + 5 °C
- temperature resistant from – 20 °C to + 70 °C
- store in dry rooms at room temperature

Piercing-foil with cavity circle 96-well

- each cavity is marked by a circle and a numerical printing
- prepierced in each cavity optimizes opening by tip
- self-closing film reduces the risk of cross-contamination
- also for use with micro-racks and critical PCR plates
- temperature resistant from – 80 °C to + 30 °C
- DMSO-resistant

Gas permeable peeling film

- liquid tight
- high permeability
- temperature resistant from – 5 °C to + 60 °C
- store in dry rooms at room temperature (approx. 20°C-23°C)

Polypropylene peeling cover film

- suitable for Real-Time-PCR
- self-adhesive with one or two tabs
- can be removed without any residues and repeatedly used
- for all plate types; PS, PP, PC, PE, DMSO-resistant
- temperature resistant from – 80 °C to + 120 °C
- store in dry rooms at room temperature (approx. 20°C-23°C)



1



2

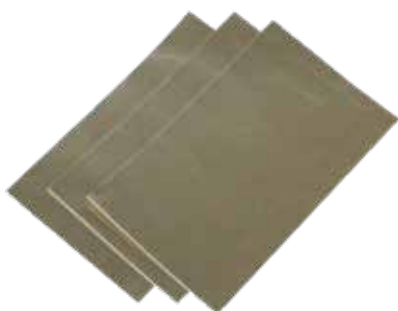


3

Product	Fig No.	Material	Packaging	Quantity per Pack	Order No.
Soft-PVC peeling cover film	1	PVC	pack 1 x 100	100	6018610
Piercing-foil with cavity circle 96-well	2	PP	pack 1 x 100	100	6018619
Gas permeable peeling film	3	PP	pack 1 x 50	50	6018618
Polypropylene peeling cover film	-	PP	pack 1 x 100	100	6018612
Polypropylen peeling cover film with 2 fixing bracket/tearing slices	-	PP	pack 1 x 100	100	6018620

PVC = Polyvinyl chloride, AL = Aluminium, PP = Polypropylene, PET = Polyester

Cover Films



4

Aluminium universal cover film, 30 µm

- material thickness: 30 µm
- can be easily removed
- ideal for piercing
- for all plate types; PS, PP, PC, PE
- temperature resistant from – 80 °C to + 120 °C
- store in dry rooms at room temperature (approx. 20°C-23°C)



5

Aluminium universal cover film, 60 µm

- material thickness: 60 µm
- with tear-off tab
- good pierceability
- for all plate types; PS, PP, PC, PE
- temperature resistant from – 80 °C to + 120 °C
- store in dry rooms at room temperature (approx. 20°C-23°C)



6

Aluminium Gold cover film

- with tear-off tab
- self-adhesive with high adhesive strength
- high solvent resistance
- not pierceable
- for manual use
- temperature resistant from – 80 °C to + 120 °C



7

Heat Sealing film, Aluminium, 30 µm

- material thickness: 30 µm
- good pierceability
- the numbers A1 indicate the top side of the foil
- sealing parameters: 160 – 180°C, 2-3 seconds
- temperature resistant from – 80 °C to + 120 °C
- DMSO-resistant
- for plate types: PS, PP

Heat Sealing film, Aluminium, 50 µm

- material thickness: 50 µm
- good pierceability
- the numbers A1 indicate the top side of the foil
- sealing parameters: 160 – 180°C, 2-3 seconds
- temperature resistant from – 20 °C to + 140 °C
- DMSO-resistant
- for plate types: PS, PP

Heat Sealing film, Polyester, 50 µm

- material thickness: 50 µm
- optically clear, peelable
- the numbers A1 indicate the top side of the foil
- sealing parameters: 160 – 185°C, 2-3 seconds
- temperature resistant from – 80 °C to + 140 °C

Product	Fig No.	Material	Packaging	Quantity per Pack	Order No.
Aluminium universal cover film, 30 µm	4	AL	pack 1 x 100	100	6018611
Aluminium universal cover film, 60 µm	4	AL	pack 1 x 100	100	6018621
Aluminium Gold cover film	5	AL	pack 1 x 100	100	6018622
Heat Sealing film, Aluminium, 30 µm	6	AL	pack 1 x 100	100	6018630
Heat Sealing film, Aluminium, 50 µm	6	AL	pack 1 x 100	100	6018631
Heat Sealing film, Polyester, 50 µm	7	PET	pack 1 x 100	100	6018632

Cryo



Think! Development and production of customized products



Pipettes & Equipment



Liquid handling products



Labware for general lab applications



Life science products for microbiology and biotechnology



Cryo products for deep-freeze applications

Cryo Boxes, Cardboard, Format 133 x 133 mm and Grid Inserts



Cryo Boxes, Cardboard, Format 133 x 133 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage even at ultra-low temperatures
- temperature-resistant down to – 80 °C
- outer dimensions 133 x 133 mm
- available with a water-repellent standard coating or with a waterproof plastic coating
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes from dia. 6 mm to dia. 28 mm
- the Cryo Boxes can be used for larger vessels when the grid is removed
- suitable grid inserts for cryo boxes available as follows:

Color	Quantity per Pack	Height 32 mm Order No.	Height 50 mm Order No.	Height 75 mm Order No.	Height 100 mm Order No.	Height 130 mm Order No.
Water-repellant standard coating						
white	10	5131321	5131501	5131751	5131 001	5131131
blue	10	5131322	5131502	5131752	5131 002	5131132
red	10	5131323	5131503	5131753	5131 003	5131133
green	10	5131324	5131504	5131754	5131 004	5131134
yellow	10	5131325	5131505	5131755	5131 005	5131135
With waterproof plastic coating						
white	10	5132321	5132501	5132751	5132 001	5132131
blue	10	5132322	5132502	5132752	5132 002	5132132
red	10	5132323	5132503	5132753	5132 003	5132133
green	10	5132324	5132504	5132754	5132 004	5132134
yellow	10	5132325	5132505	5132755	5132 005	5132135



Grid Inserts for Cryo Boxes, Format 133 x 133 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage
- temperature-resistant down to – 80 °C
- water-repellent finish
- packaging in practical folding boxes

Grid	Quantity per Pack	For Tube Dia. mm	Height of Grids 25 mm Order No.	Height of Grids 30 mm Order No.	Height of Grids 40 mm Order No.	Height of Grids 65 mm Order No.
4 x 4	10	28.0	5120214	5120215	5120216	5120217
5 x 5	10	23.0	5120124	5120125	5120126	5120127
6 x 6	10	19.0	5120134	5120135	5120136	5120137
7 x 7	10	16.0	5120144	5120145	5120146	5120147
8 x 8	10	14.0	5120154	5120155	5120156	5120157
9 x 9	10	11.5	5120165	5120166	5120167	5120168
10 x 10	10	10.5	5120175	5120174	5120176	5120177
12 x 12	10	8.5	5120185	5120184	5120186	5120187
13 x 13	10	8.0	5120194	5120195	5120196	5120197
14 x 14	10	7.0	5120204	5120205	5120206	5120207
16 x 16	10	6.0	5120225	5120226	5120227	5120228

Cryo Boxes, Cardboard 1/2-Format and Cryo Labels



Cryo Boxes and Grid Inserts, Cardboard, 1/2-Form 130 x 62 mm

Ultra-low temperature-resistant cardboard, white.

- for sample storage even at ultra-low temperatures
- temperature-resistant down to – 80 °C
- water-repellent finish

Product	Grid	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
1/2-format Cryo Boxes, cardboard	–	130 x 62 x 50	–	10	5131506
1/2-format Grid Inserts	8 x 4	124 x 58 x 30	14.0	10	5120218
1/2-format Grid Inserts	10 x 5	124 x 58 x 30	10.5	10	5120128



Rainbow Cryo labels

For customizing the white Cryo Boxes, the Rainbow Cryo labels are available in colors: red, yellow, green, blue and purple.

- temperature-resistant down to –150 °C
- 50 labels per pack, divided into 5 colors, 10 pieces of each color

Product	L x W mm	Quantity per Pack	Order No.
Rainbow Cryo labels	200 x 40	5 x 10	5120002

Cryo Boxes, Cardboard, Format 136 x 136 mm and Grid Inserts



Cryo Boxes, Cardboard, Format 136 x 136 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage even at ultra-low temperatures
- temperature resistant down to – 80 °C
- outer dimensions 133 x 133 mm
- available with a water-repellent standard coating or with a waterproof plastic coating
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes from dia. 6 mm to dia. 28.5 mm
- the Cryo Boxes can be used for larger vessels when the grid is removed
- suitable grid inserts for cryo boxes available as follows:

Color	Quantity per Pack	Height 32 mm Order No.	Height 50 mm Order No.	Height 75 mm Order No.	Height 100 mm Order No.	Height 130 mm Order No.
Water-repellant standard coating						
white	10	5141321	5141501	5141751	5141001	5141131
blue	10	5141322	5141502	5141752	5141002	5141132
red	10	5141323	5141503	5141753	5141003	5141133
green	10	5141324	5141504	5141754	5141004	5141134
yellow	10	5141325	5141505	5141755	5141005	5141135
Withwaterproof plasticcoating						
white	10	5142321	5142501	5142751	5142001	5142131
blue	10	5142322	5142502	5142752	5142002	5142132
red	10	5142323	5142503	5142753	5142003	5142133
green	10	5142324	5142504	5142754	5142004	5142134
yellow	10	5142325	5142505	5142755	5142005	5142135



Grid Inserts for Cryo Boxes, Format 136 x 136 mm

Ultra-low temperature-resistant cardboard.

other sizes available on request

- for sample storage
- temperature-resistant down to – 80 °C
- water-repellent finish
- packaging in practical folding boxes

Grid	Quantity per Pack	For Tube Dia. mm	Height of Grids 25 mm Order No.	Height of Grids 30 mm Order No.	Height of Grids 40 mm Order No.	Height of Grids 65 mm Order No.
4 x 4	10	28.5	5120210	5120211	5120212	5120213
5 x 5	10	23.5	5120121	5120120	5120122	5120123
6 x 6	10	19.5	5120131	5120130	5120132	5120133
7 x 7	10	16.5	5120143	5120140	5120142	5120141
8 x 8	10	14.5	5120152	5120150	5120151	5120153
9 x 9	10	12.0	5120163	5120160	5120161	5120162
10 x 10	10	11.0	5120173	5120170	5120172	5120171
12 x 12	10	9.0	5120182	5120180	5120181	5120183
13 x 13	10	8.5	5120190	5120193	5120191	5120192
14 x 14	10	7.5	5120202	5120203	5120201	5120200
16 x 16	10	6.5	5120221	5120222	5120223	5120224

Cryo Boxes, Cardboard, 1/2-Format and 1/4-Format

Format 136 x 136 x 75 mm and Format 148 x 148 x 130 mm



Cryo Boxes and Grid Inserts, Cardboard, 1/2-Format 134 x 67 mm and 1/4-Format 75 x 75 mm

Ultra-low temperature-resistant cardboard, white.

- for sample storage even at ultra-low temperatures
- temperature-resistant down to – 80 °C
- water-repellent finish

Product	Grid	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
Water-repellant standard coating					
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 50	–	10	5160028
1/2-format Grid Inserts	8 x 4	128 x 63 x 30	14.5	10	5120219
1/2-format Grid Inserts	10 x 5	128 x 63 x 30	11.0	10	5160029
1/4-format Cryo Boxes, cardboard	–	75 x 75 x 50	–	10	5160035
1/4-format Grid Inserts	5 x 5	68 x 68 x 30	11.0	10	5160036
With waterproof plastic coating					
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 50	–	10	5162028
1/2-format Cryo Boxes, cardboard	–	134 x 67 x 75	–	10	5162751



Cryo Boxes, Cardboard, Format 136 x 136 x 75 mm

Ultra-low temperature-resistant cardboard.

suitable for 5 ml microcentrifuge tubes

- for sample storage even at ultra-low temperatures
- with waterproof plastic coatings
- temperature resistant down to – 80 °C
- the Cryo Boxes can be used for larger vials when the grid is removed
- suitable for 5 ml microcentrifuge tubes

Color	W x D x H mm	Grid	For Tubes Ø x H mm	Quantity per Pack	Order No.
white	136 x 136 x 75	6 x 6	17 x 60	10	5142756



Cryo Boxes, Cardboard, Format 148 x 148 x 130 mm

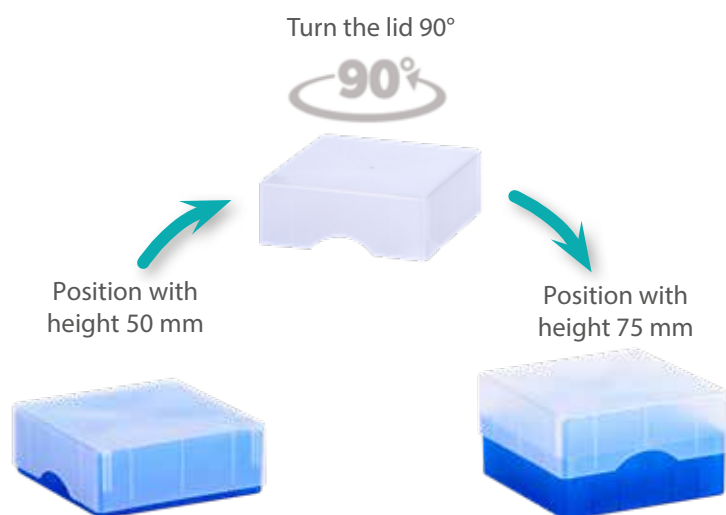
Ultra-low temperature-resistant cardboard.

suitable for centrifuge tubes

- for sample storage even at ultra-low temperatures
- with waterproof plastic coatings
- temperature resistant down to – 80 °C
- highest flexibility: Cryo Boxes can be combined with different grid inserts for tubes dia. 17 mm or dia. 30 mm
- the Cryo Boxes can be used for larger vials when the grid is removed
- suitable for centrifuge tubes: product no. 3300001 to 3300006

Color	W x D x H mm	Grid	For Tubes Ø x H mm	Quantity per Pack	Order No.
white	148 x 148 x 130	4 x 4	30 x 115	5	5144130
white	148 x 148 x 130	6 x 6	17 x 120	5	5144131

Cryo Boxes with Slip Lid, PP, Format 133 x 133 mm



2-in-1 Cryo Boxes with Slip Lid, PP, Format 133 x 133 mm

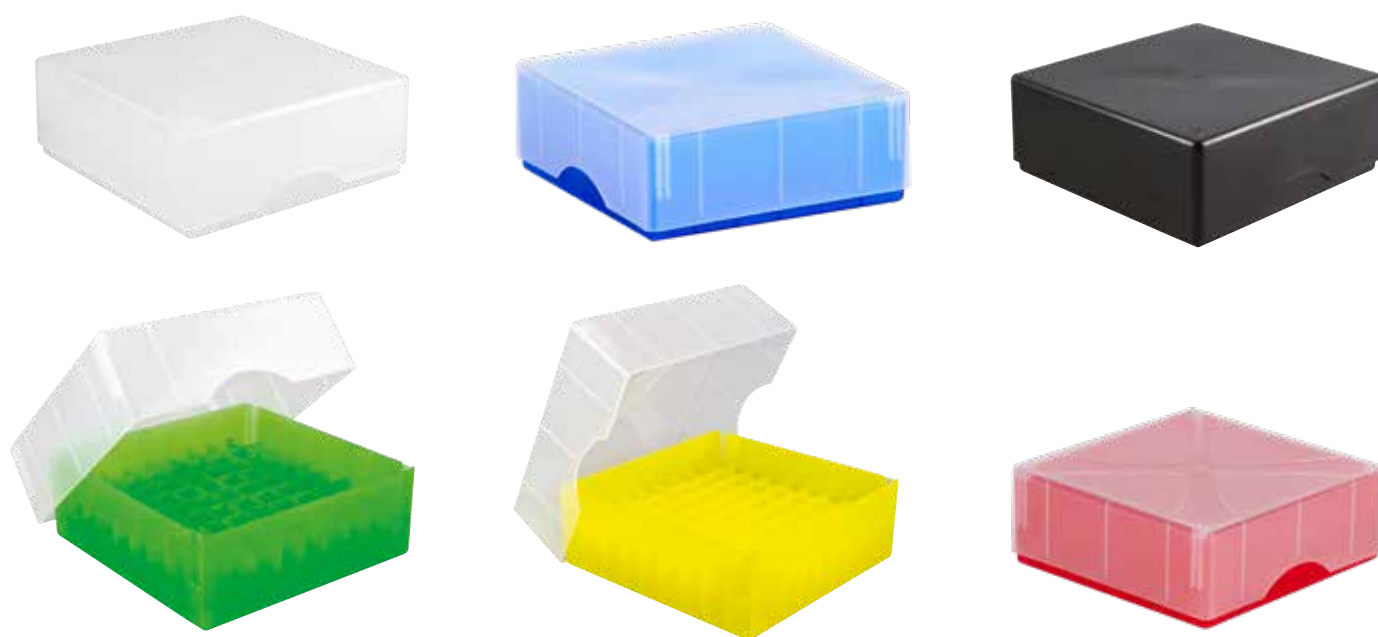
High-quality polypropylene (PP). Available in natural and other colors.

The specialty: the boxes are adjustable in height.

The boxes are available in 6 colors, with numerical coding and corresponding vents for draining condensed water.

The 6 x 6 to 10 x 10 grid accommodates space from 36 to 100 tubes.

- outer dimensions 133 x 133 mm
- autoclavable, temperature-resistant from -90°C to +121°C
- grids are available: 6 x 6, 7 x 7, 8 x 8, 9 x 9, 10 x 10
- numerically coded



	Grid For tube Dia.	6 x 6 19.0 mm	7 x 7 17.0 mm	8 x 8 15.0 mm	9 x 9 13.0 mm	10 x 10 11.5 mm
Color	Quantity per Pack	Order No.	Order No.	Order No.	Order No.	Order No.
natural	5	5320410	5320310	5320210	5320010	5320110
yellow	5	5320411	5320311	5320211	5320011	5320111
red	5	5320412	5320312	5320212	5320012	5320112
green	5	5320413	5320313	5320213	5320013	5320113
blue	5	5320414	5320314	5320214	5320014	5320114
black	5	5320415	5320315	5320215	5320015	5320115
mix pack	5	5320416	5320316	5320216	5320016	5320116

Cryo Boxes with Grids, PP, Format 133 x 133 mm



Cryo Boxes with Grids, PP, Format 133 x 133 mm

The boxes are made of high-quality polypropylene in natural or other colors. They are available with heights of 52 or 75 mm.

- autoclavable, temperature-resistant from – 90 °C to + 121 °C
- 81 places, 9 x 9 grid, numerically coded
- robust hinge with safe snap-on lid
- stackable for safe transport
- drain bores at the bottom for dew liquids
- removable grid inserts
- Cryo Boxes can also be used for larger vials by removing the grid inserts

9 x 9 grid,
numerically coded



Color	W x D x H mm	For Tube Dia. mm	Grid	Quantity per Pack	Order No.
for Cryo Tubes 1.2 – 2 ml					
natural	142 x 133 x 52	12.8	9 x 9	5	5120010
yellow	142 x 133 x 52	12.8	9 x 9	5	5120011
red	142 x 133 x 52	12.8	9 x 9	5	5120012
green	142 x 133 x 52	12.8	9 x 9	5	5120013
blue	142 x 133 x 52	12.8	9 x 9	5	5120014
black	142 x 133 x 52	12.8	9 x 9	5	5120015
for Cryo Tubes 3ml					
natural	142 x 133 x 75	12.8	9 x 9	5	5120020
yellow	142 x 133 x 75	12.8	9 x 9	5	5120021
red	142 x 133 x 75	12.8	9 x 9	5	5120022
green	142 x 133 x 75	12.8	9 x 9	5	5120023
blue	142 x 133 x 75	12.8	9 x 9	5	5120024
black	142 x 133 x 75	12.8	9 x 9	5	5120025

Cryo Boxes and Grid Inserts, PP, Format 133 x 133 mm



Cryo Boxes and Grid Inserts, PP, Format 133 x 133 mm

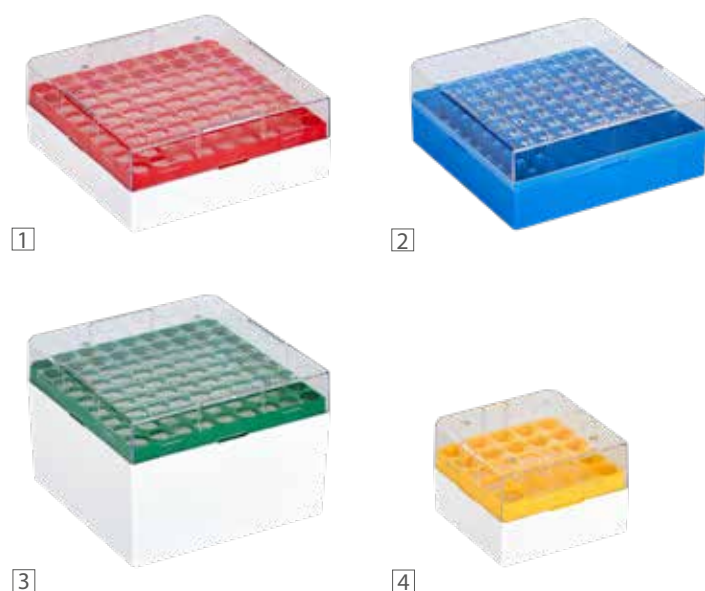
The boxes are made of high-quality polypropylene in natural or other colors. They are available with heights of 52 or 75 mm. These ratiolab® Cryo Boxes are particularly practical and flexible due to their removable grid inserts.

The separate natural-colored inserts are available in five sizes and can thus be used with sample vessels of differing diameters. The inserts fit all ratiolab® Cryo Boxes. Cleaning of the boxes and the inserts is much simpler than with Cryo Boxes with permanently fitted inserts.

- autoclavable, temperature-resistant from – 90 °C to + 121 °C
- robust hinge with safe snap-on lid
- stackable for safe transport
- drain bores at the bottom for dew liquids
- Cryo Boxes can also be used for larger vials by removing the grid inserts

Color	W x D x H mm	For Tube Dia. mm	Quantity per Pack	Order No.
Cryo Boxes without Grid Insert				
natural	142 x 133 x 52		5	5220010
yellow	142 x 133 x 52		5	5220011
red	142 x 133 x 52		5	5220012
green	142 x 133 x 52		5	5220013
blue	142 x 133 x 52		5	5220014
black	142 x 133 x 52		5	5220015
natural	142 x 133 x 75		5	5220020
yellow	142 x 133 x 75		5	5220021
red	142 x 133 x 75		5	5220022
green	142 x 133 x 75		5	5220023
blue	142 x 133 x 75		5	5220024
black	142 x 133 x 75		5	5220025
Grid Inserts				
6 x 6	142 x 133 x 30	20.5	5	5220100
7 x 7	142 x 133 x 30	17.3	5	5220101
8 x 8	142 x 133 x 30	15.8	5	5220102
9 x 9	142 x 133 x 30	12.8	5	5220103
10 x 10	142 x 133 x 30	11.2	5	5220104

Cryo Boxes with Grids, PC, Format 132 x 132 mm and 76 x 76 mm



Cryo Boxes with Grids, PC, Format 132 x 132 mm and 76 x 76 mm

Made of high-quality colored polycarbonate (PC).
For use with liquid nitrogen.

- autoclavable, temperature-resistant from – 190 °C to + 121 °C
- 81 or 100 places, 9 x 9 resp. 10 x 10 grids
- 1/4-format with 25 places, 5 x 5 grid
- numerically coded
- stackable for safe transport
- drain bores at the bottom for dew liquids

Color	Fig No.	W x D x H mm	For Tube Dia. mm	Grid	Quantity per Pack	Order No.
for Cryo Tubes 1.2 – 2 ml						
blue	1	132 x 132 x 52	12.3	9 x 9	5	5150001
green	1	132 x 132 x 52	12.3	9 x 9	5	5150002
red	1	132 x 132 x 52	12.3	9 x 9	5	5150003
yellow	1	132 x 132 x 52	12.3	9 x 9	5	5150004
for Cryo Tubes 1.2 – 2 ml						
blue	2	132 x 132 x 52	12.3	10 x 10	5	5150011
green	2	132 x 132 x 52	12.3	10 x 10	5	5150012
red	2	132 x 132 x 52	12.3	10 x 10	5	5150013
yellow	2	132 x 132 x 52	12.3	10 x 10	5	5150014
white	2	132 x 132 x 52	12.3	10 x 10	5	5150015
for Cryo Tubes 3 – 5 ml						
blue	3	132 x 132 x 94	12.3	9 x 9	4	5150021
green	3	132 x 132 x 94	12.3	9 x 9	4	5150022
red	3	132 x 132 x 94	12.3	9 x 9	4	5150023
yellow	3	132 x 132 x 94	12.3	9 x 9	4	5150024
1/4-format, for Cryo Tubes 1.2 – 2 ml						
blue	4	76 x 76 x 52	12.3	5 x 5	8	5150031
green	4	76 x 76 x 52	12.3	5 x 5	8	5150032
red	4	76 x 76 x 52	12.3	5 x 5	8	5150033
yellow	4	76 x 76 x 52	12.3	5 x 5	8	5150034

Cryo Tubes

Cryo Tubes

Polypropylene with the highest translucence. For the storing and conservation of tissue cultures and biological samples e.g. sera, blood, and spermatic. Suitable for storage from general cold storage refrigeration (+4 °C) down to the vapor phase of liquid nitrogen.

Manufactured in a Clean Room ISO 7 (UNI EN ISO 14644-1). Class 10.000 (US FED STD 209E).

- sterilized by beta-radiation, products meet a minimum sterility assurance Level (SAL) of 10^{-6}
- autoclavable at 121 °C, 20 minutes
- completely free of DNA, DNase, Pyrogen, ATP, human DNA, and PCR Inhibitor
- lid with integrated sealing function; no additional silicone O-ring

- internal conical bottom for complete emptying
- white graduation for precise measurement
- white lettering for sample identification
- available with internal or external threads
- equipped with base for use with one hand
- each tube and package is labeled with an expiry date
- cap: PE and TVP
- 2.0 ml, 4.0 ml and 5.0 ml tubes available also with round bottom
- packaged in PE bags of 50 tubes in boxes
- suitable working stations: see page 89
- suitable cryo-boxes: see pages 80-87

free of DNA, DNase,
pyrogen, ATP, human DNA,
and PCR Inhibitor



Volume ml	Description	Ø x Height mm	Packaging	Quantity per Pack	Order No.
Cryo Tubes with External Thread					
1.2	self-standing	12.3 x 41	20 x 50	1000	5110112
2.0	round base	12.3 x 46	20 x 50	1000	5110120
2.0	self-standing	12.3 x 47	20 x 50	1000	5110122
3.0	self-standing	12.3 x 71	20 x 50	1000	5110130
4.0	self-standing	12.3 x 75	20 x 50	1000	5110140
5.0	self-standing	12.3 x 90	20 x 50	1000	5110150
Cryo Tubes with Internal Thread					
1.2	self-standing	12.3 x 43	20 x 50	1000	5110013
2.0	round base	12.3 x 47	20 x 50	1000	5110025
2.0	self-standing	12.3 x 48	20 x 50	1000	5110024
4.0	self-standing	12.3 x 76	20 x 50	1000	5110041
4.0	round base	12.3 x 75	20 x 50	1000	5110042
5.0	self-standing	12.3 x 91	20 x 50	1000	5110051
5.0	round base	12.3 x 90	20 x 50	1000	5110052

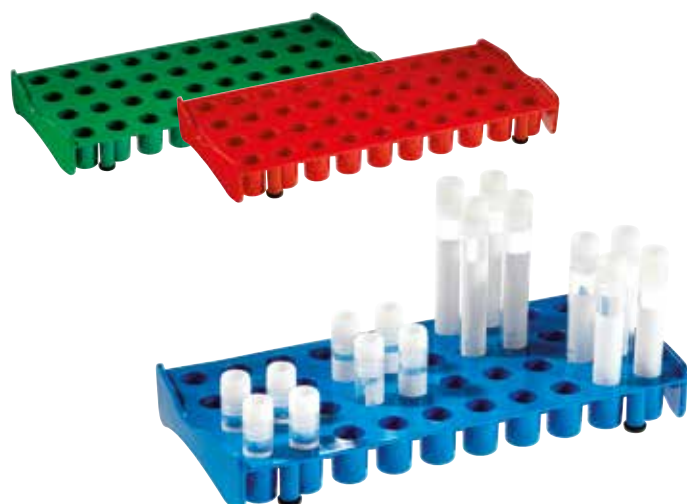
Cryo Tube Accessories



Color Coding Cap Inserts for Cryo Tube

Polypropylene. For cryo tubes 1.2 to 5.0 ml.
Packed in PE-bags with 1000 pcs.

Color	Quantity per Pack	Order No.
white	1000	5110001
red	1000	5110002
blue	1000	5110003
green	1000	5110004
yellow	1000	5110005



Work Stations for 40 Cryo Tubes

High-quality polypropylene.

For 40 Cryo Tubes 1.2 to 5 ml with 12.5 mm outer diameter. Cryo Tubes with a self-standing base are automatically locked in the Work Station and can easily be screwed and unscrewed with one hand.

- with non-slip feet, the Work Stations stand safely on laboratory benches
- autoclavable
- size (w x l x h) 100 x 220 x 30 mm



Color	Quantity per Pack	Order No.
green	5	5300400
red	5	5300200
blue	5	5300100

Racks for Freezer Chests



Vertical Racks, stainless steel

For the storing of Cryo Boxes in freezer chests.
Stainless steel.

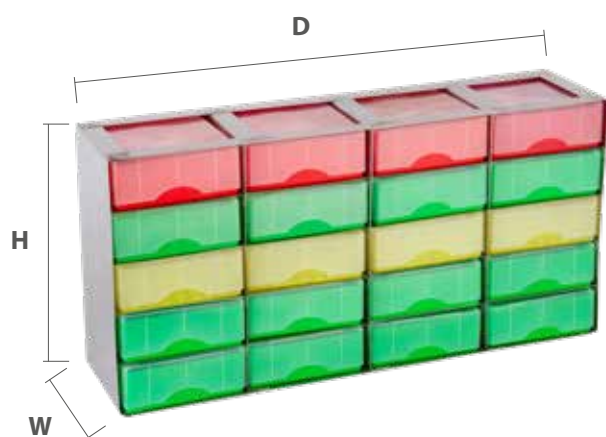
- for all Cryo Boxes format 130 x 130; 133 x 133; 136 x 136 and 148 x 148 mm
- surfaces for perfect cleaning
- robust construction
- handles for convenient transport
- rack size includes the holder
- Cryo Racks can be supplied with shelf sizes for any standard Cryo Boxes
- locking rod on request

Rack standard sizes are listed in the table below:

other sizes
available on request

Number of Shelves horizontal x vertical	Rack Size D x W x H mm	for Cryo Boxes Height					Quantity per Pack		Order No.
		32 mm	50 mm	75 mm	100 mm	160 mm			
1 x 4	150 x 150 x 665	–	–	–	–	■	1	New	5400065
1 x 4	140 x 140 x 222	–	■	–	–	–	1		5400041
1 x 5	140 x 140 x 277	–	■	–	–	–	1		5400021
1 x 5	140 x 140 x 531	–	–	–	■	–	1		5400039
1 x 6	140 x 140 x 335	–	■	–	–	–	1	New	5400067
1 x 6	140 x 140 x 482	–	–	■	–	–	1		5400028
1 x 7	140 x 140 x 385	–	■	–	–	–	1		5400042
1 x 7	140 x 140 x 561	–	–	■	–	–	1		5400029
1 x 8	140 x 140 x 441	–	■	–	–	–	1		5400027
1 x 8	140 x 140 x 641	–	–	■	–	–	1		5400030
1 x 9	140 x 140 x 495	–	■	–	–	–	1		5400026
1 x 9	140 x 140 x 720	–	–	■	–	–	1		5400031
1 x 10	140 x 140 x 550	–	■	–	–	–	1		5400000
1 x 11	140 x 140 x 406	■	–	–	–	–	1		5400032
1 x 11	140 x 140 x 604	–	■	–	–	–	1		5400023
1 x 12	140 x 140 x 443	■	–	–	–	–	1		5400033
1 x 12	140 x 140 x 659	–	■	–	–	–	1		5400025
1 x 13	140 x 140 x 479	■	–	–	–	–	1		5400034
1 x 13	140 x 140 x 713	–	■	–	–	–	1		5400001
1 x 14	140 x 140 x 516	■	–	–	–	–	1		5400035
1 x 15	140 x 140 x 552	■	–	–	–	–	1		5400036
1 x 16	140 x 140 x 589	■	–	–	–	–	1		5400037
1 x 17	140 x 140 x 625	■	–	–	–	–	1		5400038
1 x 18	140 x 140 x 662	■	–	–	–	–	1		5400024

Racks for Freezer Cabinets



Horizontal Racks, stainless steel

For the storing of Cryo Boxes in freezer cabinets and chests.
Stainless steel.

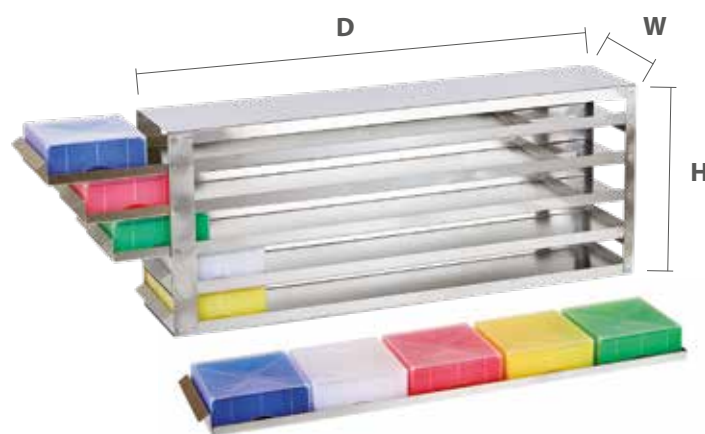
- for all Cryo Boxes format 130 x 130; 133 x 133 and 136 x 136 mm
- surfaces for perfect cleaning
- robust construction
- handles for convenient transport
- Cryo Racks can be supplied with shelf sizes for any standard Cryo Boxes

Rack standard sizes are listed in the table below:

**other sizes
available on request**

Number of Shelves horizontal x vertical	Number of Boxes	Rack Size D x W x H mm	for Cryo Boxes Height				Quantity per Pack	Order No.
			50 mm	75 mm	100 mm	130 mm		
3 x 3	9	424 x 140 x 165	■	–	–	–	1	5400007
3 x 4	12	424 x 140 x 219	■	–	–	–	1	5400009
3 x 5	15	424 x 140 x 274	■	–	–	–	1	5400022
4 x 2	8	566 x 140 x 164	–	■	–	–	1	5400011
4 x 2	8	566 x 140 x 219	–	–	■	–	1	5400010
4 x 2	8	566 x 140 x 275	–	–	–	■	1	5400012
4 x 3	12	566 x 140 x 240	–	■	–	–	1	5400006
4 x 3	12	566 x 140 x 314	–	–	■	–	1	5400040
4 x 4	16	566 x 140 x 219	■	–	–	–	1	5400004
4 x 4	16	566 x 140 x 319	–	■	–	–	1	5400005
4 x 5	20	566 x 140 x 274	■	–	–	–	1	5400003
4 x 6	24	566 x 140 x 328	■	–	–	–	1	5400002
4 x 7	28	566 x 140 x 391	■	–	–	–	1	5400008
5 x 2	10	705 x 140 x 161	–	■	–	–	1	5400016
5 x 2	10	705 x 140 x 212	–	–	■	–	1	5400020
5 x 3	15	705 x 140 x 240	–	■	–	–	1	5400017
5 x 4	20	705 x 140 x 219	■	–	–	–	1	5400013
5 x 4	20	705 x 140 x 319	–	■	–	–	1	5400018
5 x 5	25	705 x 140 x 274	■	–	–	–	1	5400014
5 x 6	30	705 x 140 x 328	■	–	–	–	1	5400015

Racks for Freezer Cabinets



Drawer Rack, stainless steel

For the storing of Cryo Boxes in freezer cabinets and chests.
Stainless steel.

- for all Cryo Boxes format 130 x 130; 133 x 133 and 136 x 136 mm
- cabinet slide-ins without pull-out stop
- easy-to-clean polished surface
- robust design

Rack standard sizes are listed in the table below:

**other sizes
available on request**

Number of Shelves horizontal x vertical	Number of Shelves	Rack Size D x W x H mm	for Cryo Boxes Height		Quantity per Pack	Order No.
			50 mm	75 mm		
4 x 2	8	570 x 144 x 112	■	–	1	5400043
4 x 3	12	570 x 144 x 168	■	–	1	5400044
4 x 3	12	570 x 144 x 250	–	■	1	5400019
4 x 4	16	570 x 144 x 224	■	–	1	5400046
4 x 4	16	570 x 144 x 335	–	■	1	5400066
4 x 5	20	570 x 144 x 280	■	–	1	5400045
4 x 6	24	570 x 144 x 336	■	–	1	5400047
4 x 7	28	570 x 144 x 392	■	–	1	5400049
5 x 3	15	709 x 144 x 241	–	■	1	5400052
5 x 4	20	709 x 144 x 224	■	–	1	5400050
5 x 4	20	709 x 144 x 321	–	■	1	5400053
5 x 5	25	709 x 144 x 280	■	–	1	5400048
5 x 6	30	709 x 144 x 336	■	–	1	5400051



Compartment insert for drawer racks

The compartment inserts for drawer frames prevent cryo boxes, micro test plates or racks in the SBS standard format from slipping.

Product	Quantity per Pack	Order- No.
for 4 Cryo Boxes up to 136x136mm	5	5410001
for 5 Cryo Boxes up to 136x136mm	5	5410002
for 6 Micro-Racks	5	5410101
for 7 Micro-Racks	5	5410102

Customized Racks



Individual Design and Manufacturing of Racks and Shelves for Sample Storage

Sample storage becomes more and more individual. ratiolab® develops and manufactures racks and shelves according to your requirements. Even for lower quantities, we offer this service.

Send us your request including the dimensions and quantities of the storage boxes or plates which you would like to store. Furthermore, we require the inner dimensions of your chest or cabinet freezer. You will receive our suggestion for your rack in brief.

This service includes the following racks:

Chest Freezer Racks made of Stainless Steel

The individualization includes the following parameters:

- compartment dimensions (footprint)
- compartment heights
- number of compartments (rack height)
- rack marking
- locking rod or safety clamp

Cabinet Freezer Racks made of Stainless Steel

The individualization includes the following parameters:

- compartment dimensions (footprint)
- compartment heights
- number of compartments (rack height)
- rack marking
- locking rod or safety clamp

Drawer Freezer Racks made of Stainless Steel

The individualization includes the following parameters:

- drawer heights
- number and placement of drawers (rack height and depth)
- rack marking
- safety stop for secure handling

Blood Bag Racks and Cassettes

The individualization includes the following parameters:

- cassette dimensions
- required number of cassettes per rack
- rack marking

Please send your request directly to tech@ratiolab.com or contact us by phone.



Technical information



Think! Development and production of customized products



Pipettes &
Equipment



Liquid handling
products



Labware for general
lab applications



Life science products for
microbiology and biotechnology



Cryo products for
deep-freeze applications

Chemical Resistance of Plastics

The plastics used are classified as follows with respect to chemical resistance:

+ Excellent chemical resistance

Constant contact with medium gives rise to no damage to the plastic within 30 days. The plastic can, however, remain resistant over a number of years.

O Partial to good chemical resistance

Constant contact with the medium gives rise to minor damage within a period of 7-30 days; such damage is in fact partially reversible (e.g. swelling, softening, less mechanical firmness, discoloration).

— Low chemical resistance

Not suitable for constant contact with medium. Damage may occur immediately (e.g. less mechanical firmness, deformation, discoloration, cracks, dissolution).

Chemical resistance of plastics with groups of substances at 20 °C	PP	PS	HD-PE	LD-PE
Alcohols, aliphatic	+	+	+	+
Ether	O	—	O	O
Aldehydes	+	—	+	O
Ester	O	—	O	O
Hydrocarbons, aliphatic	+	—	+	O
Hydrocarbons, aromatic	O	—	+	O
Hydrocarbons, halogenated	O	—	O	O
Ketones	O	—	O	O
Alkalis	+	+	+	+
Acids, strong or concentrated	+	O	+	+
Acids, weak or diluted	+	O	+	+
Oxidizing acids, oxidizing agents	—	—	—	—

These carefully selected recommendations from the literature or from manufacturers are intended to inform and guide. However, the user is obliged to check suitability for the applications intended.

Chemical	PP 20 °C 50 °C		PS 20 °C 50 °C		HD-PE 20 °C 50 °C		LD-PE 20 °C 50 °C	
Acetaldehyde	+	—	—	—	+	O	+	—
Acetic acid (glacial), 100 %	+	O	—	—	+	+	+	O
Acetic acid, 96 %	+	+	O	O	+	+	+	+
Acetic anhydride	O	O	—	—	O	O	—	—
Acetone	+	+	—	—	+	+	+	O
Acetonitrile	+	O	—	—	+	O	+	O
Acetophenone	O	O	—	—	O	O	—	—
Acetylacetone	+	—	—	—	+	—	+	—
Acetylchloride	+	—	—	—	+	—	+	—
Acrylic acid	+	—	—	—	+	—	+	—
Acrylonitrile	O	—	—	—	+	+	+	+
Adipic acid	+	+	+	+	+	+	+	+
Allyl alcohol	+	+	+	O	+	+	+	+
Aluminum chloride	+	+	+	+	+	+	+	+
Aluminum hydroxide	+	+	O	O	+	+	+	+
Amino acids	+	+	+	+	+	+	+	+
Ammonium chloride	+	+	+	+	+	+	+	+
Ammonium fluoride	+	+	+	+	+	+	+	+
Ammonium hydroxide, 30 % (Ammonia)	+	+	O	—	+	+	+	+
Ammonium sulfate	+	+	+	+	+	+	+	+
n-Amyl acetate	O	—	—	—	+	O	O	—
Amyl alcohol (Pentanol)	+	+	O	O	+	+	+	+
Amyl chloride (Chloropentane)	—	—	—	—	—	—	—	—

Chemical Resistance of Plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Aniline	+	+	-	-	+	+	+	0
Barium chloride	+	+	+	+	+	+	+	+
Benzaldehyde	+	+	-	-	+	+	+	+
Benzene (Benzol)	+	0	-	-	+	+	0	-
Benzine (Gasoline)	0	0	-	-	+	+	0	-
Benzoyl chloride	+	0	-	-	+	+	0	-
Benzyl alcohol	0	-	-	-	0	-	0	-
Benzylamine	0		-	-	0		0	-
Benzylchloride			-	-				
Boric acid, 10 %	+	+	+	+	+	+	+	+
Bromine	-	-	-	-	-	-	-	-
Bromobenzene	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-
Bromonaphthalene			-	-				
Butanediol	+	+	-	-	+	+	+	+
1-Butanol	+	+	0	-	+	+	+	+
Butylamine			-	-				
n-Butyl acetate	0	0	-	-	+	+	0	0
Butyl methyl ether	+	0	-	-	0	-	0	-
Butyric acid	-	-	-	-	0	-	-	-
Calcium carbonate	+	+	+	+	+	+	+	+
Calcium chloride	+	+	+	+	+	+	+	+
Calcium hydroxide	+	+	+	0	+	+	+	+
Calcium hypochlorite	+	+	+	+	+	+	+	+
Calomel	+	+	+	0	+	+	+	+
Carbon disulfide	-	-	-	-	-	-	-	-
Carbon tetrachloride	-	-	-	-	0	-	-	-
Chloro naphthalene								
Chloroacetaldehyde, 45 %			-	-				
Chloroacetic acid	+	+	-	-	+	+	+	+
Chloroacetone			-	-				
Chlorobenzene	0	-	-	-	-	-	-	-
Chlorobutane	0	-	-	-	0	-	0	-
Chloroform	-	-	-	-	+	0	-	-
Chlorosulfonic acid								
Chromic acid, 10 %	+	+	-	-	+	+	+	+
Chromic acid, 50 %	0	0	-	-	+	0	+	0
Chromosulfuric acid	-	-	0	0	+	-	+	-
Copper sulfate	+	+	+	+	+	+	+	+
Cresol	0	0	-	-	0	-	-	-
Cumene (isopropyl benzene)	0	-	-	-	+	0	0	-
Cyclohexane	0	-	-	-	0	-	0	-
Cyclohexanone	0	-	-	-	0	-	-	-
Cyclopentane	0	-	-	-	0	-	-	-
Decane	0				0	-		
1-Decanol	+		0		+			
Dibenzylether	+		-	-	+			
Dibromoethane								
Dibutyl phthalate	+	0	-	-	0	-	0	-
Dichloroacetic acid	0	-	0	-	0	0	0	-
Dichlorobenzene	0	-	-	-	0	-	0	-
Dichloroethane	0	-			0	-	0	-
Dichloromethane	0	-	-	-	0	-	0	-
Diesel oil (Heating oil)	+	0	-	-	+	0	0	-
Diethanolamine	0		-	-	0			
1.2 Diethylbenzene	-	-	-	-	0	-	-	-

Chemical Resistance of Plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20° C	50° C	20° C	50° C	20° C	50° C	20° C	50° C
Diethylether	0	-	-	-	0	-	-	-
Diethylamine	0	-	0	0	0	-	-	-
Diethylene glycol	+	+	0	-	+	+	+	+
Dimethyl sulfoxide (DMSO)	+	+	-	-	+	+	+	+
Dimethylaniline			-	-				
Dimethylformamide (DMF)	+	+	-	-	+	+	+	+
1.4 Dioxane	+	0	-	-	+	+	+	0
Diphenyl ether			-	-				
Ethanol	+	+	-	-	+	+	+	+
Ethanolamine	+							
Ethyl acetate	+	0	-	-	+	+	+	+
Ethyl methyl ketone	+	0	-	-	0	-	0	-
Ethylbenzene	-	-	-	-	-	-	-	-
Ethylene glycol (glycol)	+	+	+	+	+	+	+	+
Ethylene oxide	0	-	-	-	0	0	0	0
Fluoroacetic acid			-	-				
Formaldehyde, 40 %	+	+	-	-	+	+	+	+
Formamide	+	+			+	+	+	+
Formic acid, 100 %	+	+	+	0	+	+	+	+
Glycerol	+	+	+	+	+	+	+	+
Glycolic acid, 50 %	+	+			+	+	+	+
Heating oil (Diesel oil)	+	0	-	-	+	0	0	-
Heptane	0	0	-	-	0	0	0	-
Hexane	+	0	0	-	+	0	0	-
Hexanoic acid								
Hexanol	+	+			+	+	+	+
Hydriodic acid	+	+			+	+	+	+
Hydrobromic acid	+	+	0	-	+	+	+	+
Hydrochloric acid, 10 %	+	+	+	+	+	+	+	+
Hydrochloric acid, 20 %	+	+	+	+	+	+	+	+
Hydrochloric acid, 37 %	+	+	0	0	+	+	+	+
Hydrofluoric acid, 40 %	+	+	+	+	+	+	+	+
Hydrofluoric acid, 70 %	+	0	-	-	+	0	+	-
Hydrogen peroxide, 35 %	+	+	+	+	+	+	+	+
Isoamyl alcohol	+	+			+	+	+	+
Isobutanol	+	+	0	0	+	+	+	+
Isooctane			0					
Isopropanol (2-propanol)	+	+	0	0	+	+	+	+
Isopropyl ether	-	-	-	-	-	-	-	-
Lactic acid	+	+	+	+	+	+	+	+
Lugol's solution (iodine-potassium iodide solution)	+	+	0	-	-	-	-	-
Mercury	+	+	+	+	+	+	+	+
Methanol	+	+	0	-	+	+	+	0
Methoxybenzene			-	-				
Methyl formate			-	-				
Methyl propyl ketone	+	0	-	-	+	+	+	0
Methylene chloride	0	-	-	-	0	-	0	-
Mineral oil (engine oil)	+	+	+		+	+	+	0
Monochloroacetic acid	+	+	-	-	+	+	+	+
Nitric acid, 10 %	+	+	-	-	+	+	+	+
Nitric acid, 30 %	0	-	-	-	0	-	0	0
Nitric acid, 70 %	-	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	0	-	-	-
Nitrohydrochloric acid	0	-	0	-	-	-	-	-
Oleic acid			-	-				
Oxalic acid	+	+	+	+	+	+	+	+

Chemical Resistance of Plastics

Chemical	PP		PS		HD-PE		LD-PE	
	20°C	50°C	20°C	50°C	20°C	50°C	20°C	50°C
Ozone	O	–	O	O	O	–	O	–
n-Pentane								
Peracetic acid								
Perchloric acid	+	–	–	–	+	–	+	–
Perchloroethylene	–	–	–	–	–	–	–	–
Petroleum	O	–	–	–	O	–	O	–
Petroleum ether			–	–			O	
Phenol	+	+	–	–	+	+	+	O
Phenylethanol	O				O			
Phenylhydrazine	O				O			
Phosphoric acid, 85 %	+	+	+	O	+	+	+	+
Piperidine	+				+			
Potassium chloride	+	+	O	O	+	+	+	+
Potassium dichromate								
Potassium hydroxide	+	+	O	O	+	+	+	+
Potassium permanganate	+	+	+	+	+	+	+	+
Propanol	+	+	O		+	+	+	+
Propionic acid	+	O	O	–	+	O	O	–
Propylene glycol (propanediol)	+	+	+	+	+	+	+	+
Pyridine	O	O	–	–	+	O	+	O
Salicylaldehyde	+	+	–	–	+	+	+	+
Salicylic acid	+	+	+	+	+	+	+	+
Silver acetate	+	+	O	O	+	+	+	+
Silver nitrate	+	+	O	O	+	+	+	+
Sodium acetate	+	+	+	+	+	+	+	+
Sodium chloride	+	+	+	+	+	+	+	+
Sodium dichromate	+	+	+	O	+	+	+	+
Sodium fluoride	+	+	+	+	+	+	+	+
Sodium hydroxide, 30 %	+	+	+	+	+	+	+	+
Sulfuric acid, 60 %	+	+	–	–	+	+	+	+
Sulfuric acid, 98 %	–	–	–	–	O	–	O	–
Tartaric acid	+	+	+	+	+	+	+	+
Tetrachloroethylene								
Tetrahydrofuran (THF)	O	–	–	–	O	–	O	–
Tetramethylammonium hydroxide								
Toluene	O	–	–	–	O	O	O	–
Trichloroacetic acid	O	–	O	–	O	O	O	–
Trichlorobenzene	–	–	–	–	–	–	–	–
Trichloroethane	–	–	–	–	O	–	–	–
Trichloroethylene	–	–	–	–	O	–	–	–
Trichlorotrifluoroethane			–	–				
Triethanolamine			–	–				
Triethylene glycol	+	+	+	O	+	+	+	+
Trifluoroacetic acid (TFA)			–	–				
Trifluoro ethane			–	–				
Tripropylene glycol	+	+	+	+	+	+	+	+
Turpentine	–	–	–	–	O	–	O	–
Urea	+	+	+	+	+	+	+	+
Xylene	–	–	–	–	O	–	O	–
Zinc chloride, 10 %	+	+	+	+	+	+	+	+
Zinc sulfate, 10 %	+	+	+	+	+	+	+	+

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our products, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, not the suitability of the products for a specific purpose.

Sterilizing plastic - Autoclaving

Recommended autoclave cycle: 20 minutes at 121 °C, 1 bar
The following plastics can be autoclaved several times: PP and PC

Standard abbreviations for plastics

DIN-Abbrev.	Description	Application temperature (°C)	
		from	to
ABS	acrylic butadiene styrene copolymer	-40	+85 (+100)
E-CTFE	ethylene chlortrifluoretylene	-70	+150 (+170)
ETFE	ethylene tetrafluor ethylene	-100	+150 (+180)
FEP	tetrafluor ethylene perfluorpropylene	-100	+205
HDPE	polyethylene high density	-50	+80 (+120)
LDPE	polyethylene low density	-50	+75 (+190)
MF	melamine	-60	+80 (+120)
NR	natural rubber	-40	+80
PA	polyamide (PA6)	-30	+80 (+140)
PBT	polybutylene terephthalate	-50	+150
PC	polycarbonate	-100	+135 (+140)
PE	polyethylene (see HDPE/LDPE)	-40	+80 (+90)
PES	polyether sulfone	-100	+150
PETG	polyethylene terephthalate	-40	+65
PFA	perfluoralkoxy	-200	+260
PMMA	polymethylmethacrylate	-40	+85 (+90)
PMP (TPX)	polymethylpentene	0	+150 (+180)
POM	polyoxymethylene	-40	+110 (+140)
PP	polypropylene	-100	+110 (+140)
PS	polystyrene	-20	+70 (+80)
PSU	polysulfone	-100	+150
PTFE	polytetrafluor ethylene	-200	+260
PVC	polyvinylchlorid	-20	+80
PVDF	polyvinylidene flouride	-40	+105 (+150)
SAN	styren acrylonitrile	-20	+85 (+95)
SI	silicone rubber	-50	+180 (+250)
TPE	thermoplastic elastomer	-50	+121
TPV	thermoplastic vulcanizate	-60	+135

Disclaimer: All information in this table are without guarantee.
Legal claims are excluded here.

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